

demodulating said carrier wave to extract data that represents said executable program;

storing said executable program at said television signal converter in said storage device; and

executing said executable program at said television signal converter on said control processor, said control processor executing said downloaded executable program to receive information from an external source to effect said video display.

55. (New Claim) The method of claim 54, wherein said storage device is a non-volatile storage device.

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56. (New Claim) The method of claim 54, wherein said information from said external source to said downloaded executable program is an instruct-to-decrypt signal.

57. (New Claim) The method of claim 54, wherein said information from said external source is an instruct to display information on said video display that is one of communicated with and identified by in said downloaded executable program.

58. (New Claim) The method of claim 54, wherein said carrier wave in said step of receiving a carrier wave from said television distribution network is an in-band broadcast.

59. (New Claim) The method of claim 58, wherein said in-band broadcast is a television signal with data information modulated in said television signal outside the visible range of said television signal.

60. (New Claim) The method of claim 54, wherein said received carrier wave in said cable television distribution network is an out-of-band broadcast.

61. (New Claim) The method of claim 60, wherein said out-of-band broadcast is a frequency modulated control carrier.

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62. (New Claim) The method of claim 54, wherein said television distribution network is a multichannel satellite network wherein said received carrier is an in-band broadcast.

63. (New Claim) The method of claim 54, wherein said television distribution network is a multichannel satellite network wherein said received carrier is an out-of-band broadcast.

64. (New Claim) The method of claim 54, wherein said information from said external source to said downloaded executable program causes said downloaded executable program to assert a control signal to control a video cassette recorder.

65. (New Claim) The method of claim 54, wherein said information from said from said external source to said downloaded executable program

causes said downloaded executable program to assert a control signal to control external audio equipment.

66. (New Claim) The method of claim 54, wherein said storage device is a magnetic computer disk.

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67. (New Claim) A method for controlling the display of video information on a remote display from a cable head end by downloading an executable program from a source device over a cable network to a remote control processor, said remote control processor having a first storage device, by transmitting an executable program from a second data storage device at said cable head end, said method comprising the steps of:

- receiving said executable program over said cable network at said remote control processor;
- storing said executable program at said remote control processor in said storage device; and
- executing said executable program at said remote control processor, said downloaded executable program receiving messages from said cable head end to effect operation of said downloaded program,

wherein said method controls displaying said video information on said remote display.

68. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-decrypt signal.

69. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-generate signal.

70. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-control signal.

71. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-record signal.

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72. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-enable signal.

73. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-transfer signal.

74. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-delay signal.

75. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-tune signal.

76. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-coordinate signal.

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77. ~~(New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-compare signal.~~

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78. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an ~~instruct-to-overlay signal.~~

79. (New Claim) The method of claim 67, wherein at least one of said messages from said from said cable head end to said downloaded executable program is an instruction to perform a logical if function based on conditions in said control processor program.

80. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-transmit signal.

81. (New Claim) The method of claim 67, wherein said message from said from said cable head end to said downloaded executable program is an instruct-to-encode signal.

82. (New Claim) An addressable cable television signal converter with a decoder, a controller and a storage device for receiving, storing, and processing information from a multichannel cable television signal comprising:

an input for receiving a multichannel cable television signal, said multichannel cable television signal divided into channels in the frequency domain;

a mixer that receives said multichannel signal from said input, said mixer converting the frequency of said multichannel cable television signal to an intermediate frequency signal;

a local oscillator providing a signal to said mixer, said local oscillator selectively generating said signal at a frequency for said mixer to select an analog control carrier from said multichannel cable television signal and convert said analog control carrier to said intermediate frequency signal;

a decoder to demodulate said intermediate frequency signal from said mixer, said decoder converting said analog control carrier at said intermediate frequency to a digital signal, said digital signal having an identifying part and a data portion;

an input data buffer operatively connected to said decoder to receive and buffer said digital signal;

a controller operatively connected to said input data buffer to receive said digital signal, said controller processing said digital signal to decode said identifying part of said digital signal to extract a destination address from said

identifying part and compare said destination address from said decoded identifying part of said digital signal to a predetermined cable television converter address to determine if said destination address from said decoded identifying part of said digital signal matches said predetermined cable television converter address and decode said data portion of said digital signal to receive information that represents programming information; and

a storage device operatively connected to said controller, said storage device storing information decoded from said data portion of said digital signal.

83. (New Claim) The apparatus of claim 82, wherein said predetermined destination address is a unique address for a particular cable television signal converter.

84. (New Claim) The apparatus of claim 82, wherein said predetermined destination address is a global address for a plurality of cable television signal converters.

85. (New Claim) The apparatus of claim 82, wherein:  
said controller decodes said data portion of said digital signal to receive information that represents channel names for said multichannel cable television signal; and said storage device stores information decoded from said data portion of said digital signal, said information representing channel names for said multichannel cable television signal.

86. (New Claim) The apparatus of claim 82, wherein:

said controller decodes said data portion of said digital signal to receive digital information that represents a message, said message having an identification code that matches a predetermined television signal converter message parameter; and said storage device stores said decoded messages.

87. (New Claim) The apparatus of claim 82, wherein:

said controller decodes said data portion of said digital signal to receive information representing targeted advertising, said advertising directed to a specific predetermined cable television converter address.

88. (New Claim) The apparatus of claim 82, wherein said controller decodes said data portion of said digital signal to receive information that represents information for the local generation of an on-screen display.

89. (New Claim) The apparatus of claim 82, wherein said controller decodes said data portion of said digital signal to receive information that represents said cable television signal converter frequencies for said local oscillator to configure said cable television signal converter for different frequency divisions of said multichannel cable television signal.

90. (New Claim) The apparatus of claim 82, wherein said controller decodes said data portion of said digital signal to receive information that represents said cable television signal converter channel number correlation to channel frequency for said controller to configure said cable television signal converter for different frequency assignments for a selected channel of said multichannel cable television signal.



91. (New Claim) The apparatus of claim 82, further comprising:  
a modulator connected to said controller, said modulator to transmit a carrier modulated with digital information to establish a data link between said cable television signal converter and an external system.

92. (New Claim) The apparatus of claim 91, wherein said external system is a video cassette recorder.

93. (New Claim) The apparatus of claim 91, wherein said external system is located at a cable head end.

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94. (New Claim) The apparatus of claim 91, wherein said external system is a local microcomputer display device.

95. (New Claim) The apparatus of claim 91, wherein said modulator is a telephone modem connected to a telephone interface module.

96. (New Claim) The apparatus of claim 82, wherein said controller decodes said data portion of said digital signal to receive information that represents programming identification, said programming identification including a program name on said multichannel cable signal for a particular program transmission.

97. (New Claim) An addressable cable television signal converter with a decoder, controllers and a storage device for receiving, storing, and processing information from a multichannel cable television signal comprising:

an input for receiving a multichannel cable television signal, said multichannel cable television signal divided into channels in the frequency domain;

a mixer that receives said multichannel signal from said input, said mixer converting the frequency of said multichannel cable television signal to an intermediate frequency signal;

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a local oscillator providing a signal to said mixer, said local oscillator selectively generating said signal at a frequency for said mixer to select an analog control carrier from said multichannel cable television signal and convert said analog control carrier to said intermediate frequency signal;

a decoder to demodulate said intermediate frequency signal from said mixer, said decoder converting said analog control carrier at said intermediate frequency to a digital signal, said digital signal having an identifying part of a signal portion and a data portion;

an input data buffer operatively connected to said decoder to receive and buffer said digital signal;

a first controller operatively connected to said input data buffer to receive said digital signal, said first controller processing said digital signal to decode said identifying part of a signal portion of said digital signal to extract a destination address from said identifying part of a signal portion and compare said destination address from said decoded identifying part of a signal portion of said digital signal to a predetermined cable television converter address to determine if said destination address from said decoded identifying part of a

signal portion of said digital signal matches said predetermined cable television converter address and decode said data portion of said digital signal to receive information that represents programming information;

a storage device operatively connected to said first controller, said storage device storing information decoded from said data portion of said digital signal; and

a second controller operatively connected to said first controller, said second controller for performing a separate executable computer program, said separate executable program receivable from said data portion of said digital signal from said multichannel cable television signal.

98. (New Claim) The apparatus of claim 97, wherein said executable program is a computer generated graphic.

99. (New Claim) The apparatus of claim 97, wherein said programming information is data for use in a locally generated video signal.

100. (New Claim) The apparatus of claim 97, wherein said second controller is operatively connected to said first processor by a data link.

101. (New Claim) The apparatus of claim 97, wherein said second controller is electrically connected to said first processor.

102. (New Claim) An addressable cable television signal converter with a decoder, a controller and a storage device for receiving, storing, and processing information from a multichannel cable television signal comprising:

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an input for receiving a multichannel cable television signal, said multichannel cable television signal divided into channels in the time domain;

a local oscillator providing a signal to a mixer, said local oscillator selectively generating said signal at a frequency for said mixer to select a carrier from said multichannel cable television signal and convert said carrier to said intermediate frequency signal;

a decoder to demodulate said intermediate frequency signal from said mixer, said decoder converting information in said carrier at said intermediate frequency to a digital signal, said digital signal having an identifying part of a signal and a data portion;

an input data buffer operatively connected to said decoder to receive and buffer said digital signal;

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a controller operatively connected to said input data buffer to receive said digital signal, said controller processing said digital signal to decode said identifying part of a signal of said digital signal to extract a destination address from said identifying part of a signal and compare said destination address from said decoded identifying part of a signal of said digital signal to a predetermined cable television converter address to determine if said destination address from said decoded identifying part of a signal of said digital signal matches said predetermined cable television converter address and decode said data portion of said digital signal to receive information that represents programming information; and

a storage device operatively connected to said controller, said storage device storing information decoded from said data portion of said digital signal.

103. (New Claim) An addressable satellite television signal converter with a decoder, a controller and a storage device for receiving, storing, and processing information from a multichannel satellite television signal comprising:

an input for receiving a multichannel satellite television signal, said multichannel satellite television signal divided into channels in the frequency domain;

a local oscillator providing a signal to a mixer, said local oscillator selectively generating said signal at a frequency for said mixer to select a television carrier from said multichannel satellite television signal and convert said television carrier to said intermediate frequency signal;

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a decoder to demodulate said intermediate frequency signal from said mixer, said decoder converting information in said television carrier at said intermediate frequency to a digital signal, said digital signal having an identifying part of a signal and a data portion;

an input data buffer operatively connected to said decoder to receive and buffer said digital signal;

a controller operatively connected to said input data buffer to receive said digital signal, said controller processing said digital signal to decode said identifying part of a signal of said digital signal to extract a destination address from said identifying part of a signal and compare said destination address from said decoded identifying part of a signal of said digital signal to a predetermined satellite television converter address to determine if said destination address from said decoded identifying part of a signal of said digital signal matches said predetermined satellite television converter address and decode said data

portion of said digital signal to receive information that represents programming information; and

a storage device operatively connected to said controller, said storage device storing information decoded from said data portion of said digital signal.

104. (New Claim) The apparatus of claim 103, wherein said programming information is program identification, said program identification enabling selection of television programming based on a program name.

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105. (New Claim) A method for receiving commands on a television signal from a transmitter station at a receiver station, said receiver station having a controller that controls the display of information on a display device, said transmitter station encoding said commands into a non-visible portion of said television signal and transmitting said television signal, said method comprising the steps of:

receiving said television signal at said receiver station;

decoding said commands from said non-visible portion of said television signal; and

displaying information on said display device in response to said controller acting on said commands decoded from said television signal in said step of decoding said command.

106. (New Claim) A method of controlling a plurality of receiver stations each of which includes a television receiver, a signal detector, a processor, and with each said receiver station adapted to detect the presence of at

least one control signal and programmed to process at least one downloadable processor instruction, said method comprising the steps of:

(1) receiving at a transmitter station at least one downloadable processor instruction which is effective at said plurality of receiver stations to at least one of receive, generate, and present output to at least one of complete and supplement programming containing a predetermined sequence of video images based on a subscriber reaction to a prompt communicated in said programming containing said predetermined sequence of video images, said at least one downloadable processor instruction instructs at each of said plurality of receiver stations said processor to process data;

(2) transferring said at least one downloadable processor instruction from said transmitter station to a transmitter;

(3) receiving at least one control signal at said transmitter station, said at least one control signal operate to execute said at least one downloadable processor instruction; and

(4) transferring said at least one control signal from said transmitter station to said transmitter, and transmitting an information transmission comprising the at least one downloadable processor instruction and said at least one control signal wherein a step of controlling a plurality of receiver stations each of which includes a television receiver, a signal detector, a processor, and with each said receiver station adapted to detect the presence of at least one control signal,

wherein said method controls said plurality of receiver stations to detect the presence of said at least one control signal.

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107. (New Claim) The method of claim 106, wherein one of said downloadable processor instruction and a portion of identification data with respect to said downloadable processor instruction are embedded in a television signal.

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108. (New Claim) The method of claim 106, wherein a television program is displayed at a receiver station, said television program containing said predetermined sequence of video images and said at least one downloadable processor instruction programs said receiver station processor to at least one of output (1) one of video, audio, and text to complete said television program containing said predetermined sequence of video images (2) process a viewer reaction to said television program and (3) select information that supplements said television program containing said predetermined sequence of video images.

109. (New Claim) The method of claim 106, wherein said at least one control signal incorporate a portion of said at least one downloadable processor instruction.

110. (New Claim) A method of communicating subscriber station information from a subscriber station to at least one remote data collection station, said method comprising the steps of:

- (1) inputting a subscriber reaction at said subscriber station;
- (2) receiving at said subscriber station information that designates at least one of an instruct signal to process and an output to deliver in consequence of specific subscriber input;



(3) determining the presence of said specific subscriber input at said subscriber station by processing said subscriber reaction;

(4) processing said instruct signal which is effective to at least one of receive, generate, and present output to one of complete and supplement a predetermined sequence of video images at said subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to at least one remote data collection station at least one datum confirming delivery of at least one of said instruct signal from said step of processing and said effect from said step of processing,

wherein said method communicates said subscriber station information from said subscriber station to said at least one remote data collection station.

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111. (New Claim) The method of claim 110, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to receive at least one of specific mass medium programs, data, news items, and computer control instructions; and

receiving said at least one of said specific mass medium programs, data, news items, and computer control instructions in accordance with said instruction.

112. (New Claim) The method of claim 110, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to at least one of process and present at least at least one of mass medium programs, data, news items, and computer control instructions in a specific fashion; and

one of processing and presenting said at least one of said specific mass medium programs, data, news items, and computer control instructions in accordance with said instruction.

113. (New Claim) The method of claim 110, wherein said information that designates one of a specific subscriber input and said instruct signal is detected in an information transmission from one of data and a programming source, said method further comprising the steps of:

programming a processor to respond to information communicated from at least one of said data and programming source;

receiving an information transmission from at least one of said data and programming source;

inputting at least a portion of said information transmission to a control signal detector;

detecting at least one of said data and said instruct signal in said information transmission; and

passing at least one of said detected data and said instruct signal to said processor.

114. (New Claim) A method of signal processing at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

receiving on said receiver identification signals that identify specific signal content for at least one of a plurality of concurrent broadcast and cablecast signal transmissions;

providing a comparison signal to said processor;

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comparing said comparison signal to said identification signals to generate a control signal identifying a desired one of said plurality of broadcast and cablecast signal transmissions;

tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of broadcast and cablecast signal transmissions;

inputting at least a portion of said desired signal transmission to said processor; and

based on an instruct signal detected in said desired signal transmission, performing at least one of:

(1) processing a subscriber reaction to a prompt communicated in programming containing a predetermined sequence of video images;

(2) selecting data to be processed to at least one of generate and present output to one of complete and supplement said programming containing said predetermined sequence of video images; and

(3) one of receiving, generating, and presenting output to one of complete and supplement television programming,

wherein said method of signal processing processes at a receiver station.

115. (New Claim) A method of controlling a remote intermediate data transmitter station to communicate data to at least one receiver stations, with said remote transmitter station including one of a broadcast and cablecast transmitter for transmitting instruct signals which are effective at a receiver station to instruct one of a computer and processor, a plurality of selective transfer devices each operatively connected to said one of said broadcast and cablecast transmitter for communicating said instruct signals, a receiver for receiving said instruct signals from at least one origination transmitter station, a

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control signal detector, and a controller capable of controlling at least one of said selective transfer devices, and with said remote transmitter station adapted to detect the presence of at least one control signal to control communication of specific said instruct signals and to deliver to one of said broadcast and cablecast transmitter at least one of said instruct signals, said method comprising the steps of:

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(1) receiving said at least one instruct signal at said at least origination transmitter station and delivering said at least one instruct signal to at least one origination transmitter, said at least one instruct signal being effective to at least one of receive, generate, and present output to one of complete and supplement a predetermined sequence of video images based on a subscriber reaction to a prompt communicated in programming containing said predetermined sequence of video images;

(2) receiving said at least one control signal which at the remote intermediate data transmitter station operate to control the communication of said at least one instruct signal; and

(3) transmitting said at least one control signal to said at least one origination transmitter before a specific time,

wherein said method of controlling controls said remote intermediate data transmitter station to communicate said data to said at least one receiver station.

116. (New Claim) The method of claim 115, further comprising the step of embedding a specific one of said at least one control signal in one of said instruct signal and in an information transmission containing said instruct signal before transmitting said instruct signal to said remote transmitter station.

117. (New Claim) The method of claim 115, wherein said specific time is a scheduled time of transmitting one of said instruct signal and a portion of information associated with said instruct signal from said remote intermediate data transmitter station and said at least one control signal are effective at said remote intermediate data transmitter station to control said plurality of selective transfer devices at different times.

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118. (New Claim) A method of controlling a network comprising a remote intermediate data transmitter station and at least one receiver station, with said remote transmitter station including one of a broadcast and cablecast transmitter for transmitting at least one instruct signal which is effective at a receiver station to instruct a processor, a plurality of selective transfer devices each operatively connected to one of said broadcast and cablecast transmitter for communicating said instruct signals, a receiver for receiving said instruct signals from at least one origination transmitter station, a control signal detector, and one of a controller and computer capable of controlling at least one of said selective transfer devices, and with said remote transmitter station adapted to detect the presence of at least one control signal to control communication of specific said instruct signals and to deliver to one of said broadcast and cablecast transmitter at least one of discrete signaling appearances and signals, said network having at least one processor capable of assembling at least one processor instruction, said method comprising the steps of:

(1) receiving said discrete signaling appearances at said at least one origination transmitter station and delivering said discrete signaling appearances to at least one origination transmitter, said discrete signaling appearances being operative in said network to serve as a basis for assembling said at least one

processor instruction, said at least one processor instruction being effective at the receiver station to at least one of receive, generate, and present output to one of complete and supplement a predetermined sequence of video images based on a subscriber reaction to a prompt communicated in programming containing said predetermined sequence of video images;

(2) receiving said at least one control signal which at the remote intermediate data transmitter station operate to control communication of said discrete signaling appearances; and

(3) transferring said at least one control signal to said at least one origination transmitter before a specific time, said at least one origination transmitter transmitting said discrete signaling appearances and said at least one control signal,

wherein said method of controlling controls said network.

119. (New Claim) The method of claim 118, further comprising the step of embedding said at least one control signal in an information transmission containing said discrete signaling appearances before transmitting said discrete signaling appearances to said remote transmitter station.

120. (New Claim) The method of claim 118, wherein said specific time is a scheduled time of transmitting a signal containing at least one of said discrete signaling appearances and said at least one processor instruction from said remote intermediate data transmitter station and said at least one control signal is effective at the remote intermediate data transmitter station to control said plurality of selective transfer devices at different times.

121. (New Claim) The method of claim 118, further comprising the step of embedding at least one of said discrete signaling appearances and said at least one control signal in a non-visible portion of one of a television signal and one of a multichannel broadcast and cablecast signal.

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122. (New Claim) The method of claim 118, wherein said at least one control signal includes at least one of a code and data which operates to select one of said discrete signaling appearances, said at least one processor instruction, and a portion of program content associated with at least one of said discrete signaling appearances and said processor instruction, said method further comprising the step of:

transmitting an instruct signal which operates at the remote intermediate data transmitter station at said specific time to communicate said one of said code and data to a transmitter.

123. (New Claim) A method of controlling a remote transmitter station to deliver a receiver specific mass medium program presentation at a receiver station, said method comprising the steps of:

- (1) receiving a mass medium program containing audio and a predetermined sequence of video images at the remote transmitter station and delivering said mass medium program to a transmitter;
- (2) receiving at said remote transmitter station at least one instruct signal which operates to at least one of receive, generate, and present output to one of complete and supplement a mass medium program based on a subscriber reaction to a prompt communicated in programming containing said predetermined sequence of video images;

(3) receiving a control signal which operates at the remote transmitter station to control communication of said at least one instruct signal and communicating said control signal to said remote transmitter station;

(4) receiving one of a code and datum designating a specific said at least one instruct signal to be transmitted by the remote transmitter station, and said transmitter station transferring said designated specific said at least one instruct signal to a transmitter; and

(5) transmitting from said remote transmitter station an information transmission comprising said mass medium program and said at least one designated instruct signal, said at least one instruct signal being transmitted at specific times and on specific channels,

wherein said method of controlling controls said remote transmitter station to deliver said receiver specific mass medium program presentation at said receiver station.

124. (New Claim) The method of claim 123, wherein said at least one designated instruct signal comprises an identification datum of at least one of said mass medium program and a portion of downloadable processor instruction.

125. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes a television receiver, a signal detector, at least one of a computer and processor, and with each said receiver station adapted to detect the presence of at least one control signal and to input a subscriber reaction to a specific offer communicated in a television program, said method comprising the steps of:



(1) receiving one of a code and datum at a transmitter station, said one of code and datum designates one of a product and service displayed in one of said television program and said subscriber reaction;

(2) receiving at said transmitter station an instruct signal which is effective at the receiver station to at least one of receive, generate, and present output to one of complete and supplement television program based on said subscriber reaction;

(3) transferring at least one of said code and datum and said instruct signal to a transmitter at said transmitter station at a specific time; and

(4) transmitting (i) at least one of said code and datum and (ii) said instruct signal from said transmitter station,

wherein said method of controlling controls said at least one of said plurality of receiver stations adapted to detect the presence of at least one control signal.

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126. (New Claim) The method of claim 125, wherein one of said instruct signal and said at least one of said code and datum is embedded in one of a television signal and in a signal containing said television program.

127. (New Claim) The method of claim 125, wherein said instruct signal incorporates at least one downloadable processor instruction.

128. (New Claim) The method of claim 125, wherein at least one receiver station is adapted to detect the presence of one of said instruct signal and one of said code and datum based on a signal location in an information transmission, said method further comprising the step of causing at least a

portion of one of said instruct signal and one of said code and datum to be transmitted in said signal location.

129. (New Claim) The method of claim 125, further comprising the step of transmitting at least one downloadable processor instruction which is effective at the receiver stations to communicate said output to one of compete and supplement said television program at a specific time.

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130. (New Claim) A method of controlling a network of a plurality of receiver stations each of which includes one of a broadcast and cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive signals from one of said broadcast and cablecast signal receiver, and said processor programmed to respond to signals from said detector, and said method comprising the steps of:

(1) receiving at a broadcast and cablecast transmitter station an instruct signal which is effective in said network to at least one of receive, generate, and present output to one of compete and supplement television programming based on a subscriber reaction to a prompt communicated in said television programming;

(2) transferring said instruct signal from said transmitter station to a transmitter;

(3) receiving at least one control signal at said transmitter station, said control signals designating at least one receiver station of said network in which said instruct signal is addressed; and

(4) transferring said at least one control signal from said transmitter station to a transmitter, said transmitter station one of broadcasting and

cablecasting said instruct signal and said at least one control signal to said plurality of receiver stations,

wherein said method of controlling controls said network of said plurality of receiver stations.

131. (New Claim) The method of claim 130, wherein at least one of said instruct signal and said control signal is embedded in a non-visible portion of one of a television signal and one of a multichannel broadcast and cablecast signal that contains said television programming.

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132. (New Claim) The method of claim 130, wherein two receiver stations in said network receive and respond to said instruct signal asynchronously.

133. (New Claim) The method of claim 130, wherein a switch communicates signals selectively from a receiver and one of a memory and recorder to a transmitter, said method further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to a transmitter;

controlling said switch to communicate a signal to said transmitter in response to a signal which is effective at the transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source; and

controlling said switch to communicate to one of said memory and recorder a signal which is effective at the receiver station to instruct.

134. (New Claim) The method of claim 130, wherein a controller controls a switch to communicate to a transmitter a selected signal, further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate at least one signal according to a transmission schedule;

controlling said switch to communicate from a specific one of a plurality of signal sources; and

controlling said switch to communicate a signal to a selected one of a plurality of transmitters.

135. (New Claim) The method of claim 130, further comprising one from the group consisting of:

transmitting to a receiver station data that one of designates at least one of a time and a channel of transmission of said instruct signal and specifies at least one of title of and subject matter contained in one of mass medium programming and data associated with said instruct signal; and

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transmitting to a receiver station a control signal to cause said receiver station to tune to one of a broadcast and cablecast transmission containing a specific instruct signal.

136. (New Claim) The method of claim 130, wherein said at least one control signal further comprise downloadable processor instructions targeted to said processor at at least one of said plurality of receiver stations, said downloadable processor instructions programming at least one of a way and method in which said at least one of said plurality of receiver stations processes and responds to said instruct signal.

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137. (New Claim) The method of claim 130, wherein at least one receiver station is one of adapted to detect the presence of said control signal and programmed to respond to said instruct signal based on a signal location in an information transmission, said method further comprising the step of causing at least one of said control signal and instruct signal to be transmitted in said signal location.

138. (New Claim) A method for transferring an operating program to a remote microcontroller, said operating program controlling the display of video information on a remote display, said transfer initiated from a cable head end by transmitting an executable program from a source device located at the cable head end over a multichannel television distribution network to the remote microcontroller, said method comprising the steps of:

transmitting an executable program from a data storage device at said cable head end in response to a transmit signal;

modulating a carrier wave with data to carry said executable program over a multichannel television distribution network;  
receiving said carrier wave at the remote video control processor;  
demodulating said carrier wave to extract the data that represents said executable program;  
storing said executable program at said remote video control processor in a storage device; and  
executing said executable program at said remote video control processor, said executable program receiving messages from said cable head end that affect control of the display of video information at the remote video display.

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139. (New Claim) The method of claim 138, wherein said storage device is a disk.

140. (New Claim) The method of claim 138, wherein said received message in said step of executing is an instruct to decrypt signal.

141. (New Claim) The method of claim 138, wherein said received message in said step of executing from said cable head end is an instruct to display information on said video display that is contained in said executable program.

142. (New Claim) The method of claim 138, wherein said multichannel television distribution network is a multichannel cable network wherein said carrier in said step of modulating is an in-band broadcast.

143. (New Claim) The method of claim 138, wherein said multichannel television distribution network is a multichannel cable network wherein said carrier in said step of modulating is an out-of-band broadcast.

144. (New Claim) The method of claim 138, wherein said multichannel television distribution network is a multichannel satellite network wherein said carrier in said step of modulating is an in-band broadcast.

145. (New Claim) The method of claim 138, wherein said multichannel television distribution network is a multichannel satellite network wherein said carrier in said step of modulating is an out-of-band broadcast.

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146. (New Claim) The method of claim 138, wherein said message from said cable head end causes said executable program to assert a control signal to control a video cassette recorder.

147. (New Claim) A method for controlling the display of video information on a remote display from a cable head end by downloading an executable program from a source device over a broadcast network to a remote video control processor, said method comprising the steps of:

transmitting an executable program from a data storage device at said head end in response to a transmit signal;

receiving said executable program over said broadcast network at said remote video control processor;

storing said executable program at said remote video control processor in a storage device; and

controlling said remote video display by executing said executable program at said remote video control processor, said downloaded executable program receiving messages from said cable head end to affect said remote video display.

148. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is a decryption program and said message received in said step of executing said executable program is an instruct to decrypt signal.

149. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is a program to generate a chart of the performance of a portfolio of financial assets and said message received in said step of executing said executable program is an instruct to generate signal.

150. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is a control program for controlling the functions of said video control processor and said message received in said step of executing said executable program is a control signal to control said video control processor.

151. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is program to generate the identification of a television



program and said message received in said step of executing said executable program is program identification.

152. (New Claim) The method of claim 147, wherein said program identification includes at least the name of a television program and channel number on said communication network.

153. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is a control program to control said video control processor and said message received in said step of executing said executable program is a control signal to control an external video cassette recorder.

154. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is a decryption program and said message received in said step of executing said executable program is an instruct to decrypt signal.

155. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is a program to generate a chart of the performance of a portfolio of financial assets and said message received in said step of executing said executable program is an instruct to generate signal.

156. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an

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executable program is a control program for controlling the functions of said video control processor and said message received in said step of executing said executable program is a control signal to control said video control processor.

157. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is program to generate the identification of a television program and said message received in said step of executing said executable program is program identification.

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158. (New Claim) The method of claim 147, wherein said program identification includes at least the name of a television program and channel number on said communication network.

159. (New Claim) The method of claim 147, wherein said executable program from said cable head end, transmitted in said step of transmitting an executable program is a control program to control said video control processor and said message received in said step of executing said executable program is a control signal to control an external video cassette recorder.

160. (New Claim) A method of displaying information associated with a television program to a subscriber in a communications network, said network comprising a transmission station and a receiver station, said transmission station being capable of communicating programming information associated with a television signal, said receiver station comprising a television signal converter, a television display, and a telephone interface module for

communicating with a remote station, said network having a computer to process said programming information associated with said television program, said method comprising the steps of:

converting a television program on said television signal converter to display said television program on a television display;

receiving a command from said receiver station at said transmission station;

inputting to said computer an instruct-to-generate signal at a time when some output information content associated with said television program does not exist;

generating output information content associated with said television program in response to said instruct-to-generate signal;

transmitting a signal to said receiver station in response to said received command in said step of receiving; and

displaying said output information content associated with said television program generated in said step of generating output information content at said television monitor on said television program, to present a combined or sequential presentation of said television program and said output information content.

161. (New Claim) The method of claim 160, wherein said received command in said step of receiving a command is a customer order for a product or service described in said television program.

162. (New Claim) The method of claim 161, further comprising the step of:

generating a request for information with a computer program, said computer program executing on said computer; and

wherein said received command in said step of receiving a command is a request for information from said step of generating a request for information.

163. (New Claim) The method of claim 160, wherein said received command in said step of receiving a command is in response to a manual input by a subscriber on said television signal converter.

164. (New Claim) The method of claim 160, wherein said received command in said step of receiving a command is an input made by a computer in response to a predetermined program executing on said computer.

165. (New Claim) The method of claim 160, wherein said received command in said step of receiving a command is an identification of programming associated with a television program.

166. (New Claim) The method of claim 160, further comprising the step of:

collecting viewership statistics at least including channel number and time at which said channel is viewed; and

wherein said received command in said step of receiving a command is a viewership statistic collected in said step of collecting viewership statistics.

167. (New Claim) The method of claim 160, wherein said received command in said step of receiving a command is a request for information, said

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request for information including a specific request for information concerning pricing information for a financial portfolio of assets.

168. (New Claim) An apparatus for providing television programming information from a storage device over a broadband communication network to a television signal converter comprising:

a storage device for storing television programming information, said storage device providing a data transfer rate to support at least one television channel;

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a processor operatively connected to said storage device, said processor providing access to said television programming information stored on said storage device;

a buffer operatively connected to said storage device and controlled by said processor, said buffer re-timing the data rate from the input of said buffer connected to said storage device and the output of said buffer;

a modulator operatively connected to the output of said buffer, said modulator modulating an analog carrier with said television programming information;

a transmitter operatively connected to said modulator, said transmitter broadcasting said programming information on said broadband network, said programming information including a television program name, broadcast time and broadcast channel on said broadcast network.

169. (New Claim) A method for storing and transmitting near video on demand over a broadband network from a transmitter station to a receiver station, said transmitter station having a digital storage device, a controller and a

digital switch, said digital storage device having data records to identify video programming on said digital storage device, said method comprising the steps of:

storing video information on said digital storage device;  
creating a data record to provide an index to said video information on said storage device from said step of storing;  
receiving a request to recall said video information on said storage device in said step of storing from said receiver station;  
recalling said video information on said storage device requested in said step of receiving a request to recall in response to said request to recall;  
transmitting said video information from said storage device requested in said step of receiving a request to recall;  
switching said video information transmitted in said step of transmitting, said switch directing said video information to said receiver station identified by said request to recall from said receiver station in said step of receiving a request to recall;  
buffering said switched video information from said step of switching in an elastic data buffer;  
converting said buffered video information from said step of buffering from a digital signal to an analog television format;  
transmitting said video information from said step of converting over a broadband network to said receiver station.

~~170. (New Claim) A method of controlling a receiver station which includes a television receiver, a signal detector, a processor, an output device, and with said receiver station adapted to detect the presence of one or more~~

control signals and programmed to process downloadable executable code, said method of controlling comprising the steps of:

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- (1) receiving at a transmitter station some downloadable executable code which is effective at said receiver station to receive and process messages communicated from a broadcast or cablecast transmitter station to affect said output device, said downloadable executable code having at each of said plurality of receiver stations a target processor to process data;
  - (2) transferring said downloadable executable code from said transmitter station to a transmitter;
  - (3) receiving said one or more control signals at said transmitter station, said one or more control signals operate to execute said downloadable executable code;
  - (4) transferring said one or more control signals from said transmitter station to said transmitter; and
  - (5) transmitting at least one information transmission containing said downloadable executable code and said one or more control signals to said receiver station, said information transmission effective to control said receiver station.

171. (New Claim) The method of claim 170, wherein said downloadable executable code or some identification data in respect of said downloadable executable code are embedded in a television signal.

172. (New Claim) The method of claim 170, wherein a television program is displayed at a receiver station and said downloadable executable code programs said receiver station processor or computer to output video,

~~audio, or text in the context of said television program or to process a viewer reaction to said television program or to select information that supplements said television program content.~~

~~173. (New Claim) The method of claim 170, wherein said one or more control signals incorporate some of said downloadable executable code.~~

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174. (New Claim) A method of controlling a receiver station output device at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

- receiving receiver identification signals that identify specific signal content for at least one of a plurality of concurrent broadcast or cablecast signal transmissions;

- providing a comparison signal to said processor;
- comparing said comparison signal to said identification signals and generating a control signal identifying a desired one of said plurality of broadcast or cablecast signal transmissions;

- tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of broadcast or cablecast signal transmissions;

- inputting at least some of said desired signal transmission to said processor; and

- performing one of:

- (1) responding to an instruct signal detected in said desired signal transmission which is effective to receive and process messages communicated from a broadcast or cablecast transmitter station to control a receiver station output device;



(2) selecting data in said desired signal transmission to be processed on the basis of a messages communicated from a broadcast or cablecast transmitter station to control a receiver station output device; and

(3) receiving in said desired signal transmission and processing messages to control a receiver station output device.

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175. (New Claim) A method of controlling a remote intermediate transmitter station to communicate at least one instruct signal to one or more receiver stations, with said remote intermediate transmitter station including a broadcast or cablecast transmitter for transmitting said at least one instruct signal, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter for communicating said at least one instruct signal, a receiver for receiving said at least one instruct signal from at least one origination station, a control signal detector, and a controller or computer capable of controlling one or more of said selective transfer devices, and with said remote intermediate transmitter station adapted to detect the presence of one or more control signals, to control the communication of said at least one instruct signal in response to said one or more control signals, and to deliver at its broadcast or cablecast transmitter said at least one instruct signal, said method comprising the steps of:

(1) receiving said at least one instruct signal at said at least one origination transmitter station and delivering said at least one instruct signal to at least one origination transmitter, said at least one instruct signal being effective at said one or more receiver stations to receive and process messages communicated from at least one of said at least one origination transmitter

station and said remote intermediate transmitter station to affect a receiver station output device;

(2) receiving said one or more control signals which at the remote intermediate transmitter station operate to control the communication of said at least one instruct signal; and

(3) transmitting said one or more control signals from said at least one origination transmitter before a specific time.

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~~176. (New Claim) The method of claim 175, further comprising the step of embedding a specific one of said one or more control signals in said at least one instruct signal or in an information transmission containing said at least one instruct signal before transmitting said at least one instruct signal to said remote intermediate transmitter station.~~

177. (New Claim) The method of claim 175, wherein said specific time is a scheduled time of transmitting said at least one instruct signal or some information associated with said at least one instruct signal from said remote intermediate transmitter station and said one or more control signals are effective at said remote intermediate transmitter station to control one or more of said plurality of selective transfer devices at different times.

178. (New Claim) A method of communicating a discrete signaling appearance in a network comprising a remote intermediate transmitter station and one or more receiver stations, with said remote intermediate transmitter station including a broadcast or cablecast transmitter for transmitting at least one instruct signal, a plurality of selective transfer devices each operatively

connected to said broadcast or cablecast transmitter for communicating said at least one instruct signal, a receiver for receiving said at least one instruct signal from at least one origination station, a control signal detector, and a controller or computer capable of controlling one or more of said selective transfer devices, and with said remote intermediate transmitter station adapted to detect the presence of one or more control signals, to control the communication of said at least one instruct signal in response to said one or more control signals, and to deliver at its broadcast or cablecast transmitter at least one said discrete signaling appearance or signal units, said network having at least one processor capable of assembling executable code, said method comprising the steps of:

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(1) receiving at least one discrete signaling appearance at said at least one origination transmitter station and delivering said at least one discrete signaling appearance to at least one origination transmitter, said at least one discrete signaling appearance being operative in said network to serve as a basis for assembling some executable code, said some executable code being effective at the receiver station to receive and process messages communicated from said at least one origination transmitter station to affect a receiver station output device;

(2) receiving said one or more control signals which at the remote intermediate data transmitter station operate to control the communication of said at least one discrete signaling appearance; and

(3) transferring said one or more control signals to said at least one origination transmitter before a specific time, said at least one origination transmitter transmitting said at least one discrete signaling appearance and said one or more control signals.

179. (New Claim) The method of claim 178, further comprising the step of embedding said one or more control signals in an information transmission containing said at least one discrete signaling appearance before transmitting said at least one discrete signaling appearance to said remote transmitter station.

180. (New Claim) The method of claim 178, wherein said specific time is a scheduled time of transmitting said at least one discrete signaling appearance or said executable code from said remote intermediate transmitter station and said one or more control signals is effective at the remote intermediate transmitter station to control one or more of said plurality of selective transfer devices at different times.

181. (New Claim) The method of claim 178, further comprising the step of embedding at least one of said at least one discrete signaling appearance and said one or more control signals in a non-visible portion of a television signal or a multichannel broadcast or cablecast signal.

182. (New Claim) The method of claim 178, wherein said one or more control signals comprise a code or datum which operates to select said at least one discrete signaling appearance, said executable code, or some program content associated with said at least one discrete signaling appearance or said executable code, said method further comprising the step of:

transmitting an instruct signal which operates at the remote intermediate transmitter station at said specific time to communicate said code or datum to a transmitter.

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183. (New Claim) A method of processing signals to control a presentation comprising the steps of:

- receiving and storing a program that contains video information;
- receiving an instruction, said instruction having effect at a user station to receive and process messages communicated from a broadcast or cablecast transmitter station to affect a receiver station output device;
- encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal for directing a processor at a user station to perform said effect indicated by said instruction with said program; and
- storing said control signal from said step of encoding in conjunction with said program ;

wherein said method processes signals.

184. (New Claim) The method of claim 183, wherein supplemental program material is stored at the same location as said processor and said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

- storing supplemental program material in conjunction with said program and said control signal; and
- storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at a user station to query a remote station or receive supplemental program material in a broadcast or cablecast transmission.

185. (New Claim) The method of claim 183, wherein said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over a broadcast or cablecast network to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

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186. (New Claim) The method of claim 183, further comprising the steps of:

receiving a second instruction, said second instruction being one of the group consisting of:

(1) an instruction which is effective at a user station to generate some output to be associated with said program;

(2) an instruction which is effective at a user station to generate some output to be associated with said product, service, or information presentation;

(3) an instruction which is effective at a user station to display a combined or sequential presentation of a mass medium program and a user specific datum;

(4) an instruction which is effective at a user station to process a user reaction to said program;

(5) an instruction which is effective at a user station to communicate to a remote station a query in respect of information to be associated with said program or to enable display of said program;

(6) an instruction which is effective at a user station to control a user station to receive information to supplement said program;

(7) an instruction which is effective at a user station to process a digital television signal which is separately defined from standard analog television; and

(8) an instruction which is effective at a user station to serve as a basis for enabling an output device to display at least some of said program or for enabling a processor to process some executable code;

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing an ancillary processor to perform said specified second effect indicated by said second instruction with said program; and

storing said second control signal from said second step of encoding in conjunction with said program.

187. (New Claim) The method of claim 183, further having one the group consisting of:

embedding said control signal in the non-visible portion of a television signal;

embedding a code in said program that enables a computer or controller to control a presentation of said program in accordance with said control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program some information to evidence an availability, use, or usage of said program at a user station.

188. (New Claim) A method of controlling a receiver station including the steps of:

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detecting one of the presence and the absence of a broadcast or cablecast control signal;

inputting a pre-stored instruct-to-react signal to a processor based on said step of detecting the presence or absence of said broadcast or cablecast control signal;

controlling said processor to output specific information in response to said step of inputting an instruct-to-react signal; and

receiving and processing messages communicated from a broadcast or cablecast transmitter station to affect a receiver station output device on the basis of information received from said processor based on said step of controlling a processor.

189. (New Claim) The method of claim 188, wherein a buffer is operatively connected to said processor for buffering input, said method further comprising the step of:

inputting said instruct-to-react signal directly to said processor.



190. (New Claim) The method of claim 188, wherein said processor processes a datum designating a television channel or a television program, said method further having one step of the group consisting of:

controlling a tuner to tune a receiver to receive the television channel or television program designated by said processed datum;

controlling a selective transmission device to input to a control signal detector at least some portion of the television channel or television program designated by said processed datum;

controlling a control signal detector to search for one or more control signals in the television channel or television program designated by said processed datum;

controlling a selective transmission to input to a computer control signals detected in the television channel or television program designated by said processed datum;

controlling a computer to respond to control signals detected in the television channel or television program designated by said processed datum;

controlling a television monitor to display video or audio contained in the television channel or television program designated by said processed datum;

controlling a video recorder to record or play video or audio contained in the television channel or television program designated by said processed datum; and

controlling a selective transmission device to communicate to a video recorder or a television monitor the television channel or television program designated by said processed datum.

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191. (New Claim) The method of claim 188, wherein said processor processes a datum designating one or more specific channels of a multichannel cable or broadcast signal, said method further having one step of the group consisting of:

controlling a tuner to tune a converter to receive the one or more specific channels designated by said processed datum;

controlling a selective transmission device to input to a control signal detector at least some portion of the one or more specific channels designated by said processed datum;

controlling a control signal detector to search for one or more control signals in the one or more specific channels designated by said processed datum;

controlling a selective transmission to input to a computer control signals detected in the one or more specific channels designated by said processed datum;

controlling a computer to respond to control signals detected in the one or more specific channels designated by said processed datum;

controlling a television monitor to display video or audio contained in the one or more specific channels designated by said processed datum;

controlling a video recorder to record or play video or audio contained in the one or more specific channels designated by said processed datum; and

controlling a selective transmission device to communicate to a storage device or an output device the one or more specific channels designated by said processed datum.

192. (New Claim) A method of communicating signals to at least one of a plurality of receiver stations each of which includes a broadcast or cablecast

mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method comprising the steps of:

(1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at the receiver station to receive and process messages communicated from a broadcast or cablecast transmitter station to affect a receiver station output device;

(2) receiving at said broadcast or cablecast transmitter station one or more control signals which at the receiver station operate to communicate the instruct signal to a processor; and

(3) transferring said one or more control signals and said instruct signal to a transmitter, said transmitter transmitting the instruct signal and the one or more control signals.

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193. (New Claim) The method of claim 192, wherein said instruct signal or some identification data in respect of said instruct signal is embedded in a television signal or in a signal containing a television program.

194. (New Claim) The method of claim 192, wherein a switch communicates signals selectively from a receiver and a memory or recorder to a transmitter, said method further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to a transmitter;

controlling said switch to communicate a signal to said transmitter in response to a signal which is effective at the transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source; and

controlling said switch to communicate to said memory or recorder a signal which is effective at the receiver station to instruct.

195. (New Claim) The method of claim 192, wherein a controller controls a switch to communicate to a transmitter a selected mass medium program or control signal, further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate one or more instruct signals according to a transmission schedule;

controlling said switch to communicate a signal from a specific one of a plurality of instruct signal sources; and

controlling said switch to communicate an instruct signal to a selected one of a plurality of transmitters.

196. (New Claim) The method of claim 192, further comprising one from the group consisting of:

transmitting to a receiver station one or more data that designate a time or a channel of transmission of said instruct signal or that specify the title of or

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some subject matter contained in a mass medium program associated with said instruct signal; and

transmitting to a receiver station a control signal to cause said receiver station to tune to a broadcast or cablecast transmission containing a specific instruct signal.

197. (New Claim) A method for data promotion and delivery for use with an interactive mass medium program output apparatus comprising the steps of:

displaying a mass medium program that promotes data, said interactive mass medium program output apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said mass medium program whether said subscriber wants said data promoted in said step of displaying, said interactive mass medium program output apparatus having a memory for storing a code or datum;

receiving an reply from said subscriber at said input device in response to said step of prompting said subscriber, said interactive mass medium program output apparatus having a processor for processing said subscriber reply and said data;

processing said reply from said step of receiving a reply and selecting a code or datum designating said data, said interactive mass medium program output apparatus having a transmitter for communicating information to a remote station;

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communicating said selected code or datum to a remote site, said interactive mass medium output apparatus and said remote site comprising a network having a plurality of transmitter stations;

assembling, in said network, a signal unit which is effective at said interactive mass medium program output apparatus to receive and process at least one message communicated from a broadcast or cablecast transmitter station to affect said interactive mass medium program output apparatus, said interactive mass medium program output apparatus having a receiver for receiving a signal from said remote station;

delivering said signal unit at said interactive mass medium program output apparatus; and

receiving and processing said designated data on the basis of said signal unit.

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198. (New Claim) The method of claim 197, wherein at least some portion of said signal unit is embedded in the non-visible portion of a television signal.

199. (New Claim) The method of claim 197, wherein information evidencing the availability, use or usage of said mass medium program or said data is stored or communicated to a remote data collection station, said method further comprising the step of selecting evidence information that identifies or designates one or more of:

- (1) a mass medium program;
- (2) a use of data;
- (3) a transmission station;

- (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) a source or supplier of data;
  - (11) a publication, article, publisher, distributor, or an advertisement;
- and
- (12) an indication of copyright.

200. (New Claim) The method of claim 197, wherein said signal unit incorporates executable code said method further comprising the steps of:  
communicating said executable code to said processor; and  
performing, on the basis of said executable code, one selected from the group consisting of:

- (1) receiving a signal containing said data;
- (2) actuating a video, audio, or print storage or output device, as appropriate, to store or output said data;
- (3) decrypting at least a portion of said data;
- (4) controlling a selective transmission device to communicate said data to a storage device or an output device;
- (5) generating a receiver specific datum to on the basis of said data; and

(6) delivering mass medium programming at said interactive mass medium program output apparatus simultaneously or sequentially with at least some of said data.

201. (New Claim) A method for controlling a receiver station over a multichannel cable system comprising the steps of:

receiving a multichannel cable signal at a signal converter;  
converting a particular portion from said multichannel cable signal to an intermediate frequency;  
demodulating a carrier on said intermediate frequency from said step of converting;  
transmitting a digital signal from said step of demodulating to a line driver;  
transmitting said digital signal from said line driver to an input of a computer; and  
controlling said computer on the basis of computer control instructions contained in said digital signal.

202. (New Claim) A method for controlling a receiver station comprising the steps of:

receiving a broadcast or cablecast signal at a signal converter;  
controlling said converter to convert a particular portion from said broadcast or cablecast signal to an intermediate frequency;  
demodulating a carrier on said intermediate frequency from said step of controlling said converter;

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transmitting a digital signal from said step of demodulating to a line driver;

transmitting said digital signal from said line driver to an input of a computer; and

controlling said computer on the basis of computer control instructions contained in said digital signal.

203. (New Claim) The method of claim 202, further having one step of the group consisting of:

storing information evidencing a function performed in response to or in consequence of one or more of said computer control instructions; and

communicating to a remote station information evidencing a function performed in response to or in consequence of one or more of said computer control instructions.

204. (New Claim) The method of claim 202, further comprising the step of programming said receiver station to select or respond to said computer control instructions.

205. (New Claim) A method of controlling a plurality of receiver stations each of which includes a television receiver, a signal detector, a processor, and with each said receiver station adapted to detect the presence of one or more control signals and programmed to process downloadable processor instructions, said method comprising the steps of:

(1) receiving at a transmitter station at least one downloadable processor instruction which is effective at a receiver station to operate a

computer under broadcast or cablecast network control, said downloadable processor instruction having at each of said plurality of receiver stations a target processor to process data;

(2) transferring said downloadable processor instruction from said transmitter station to a transmitter;

(3) receiving said one or more control signals at said transmitter station, said one or more control signals operate to execute said downloadable processor instruction; and

(4) transferring said one or more control signals from said transmitter station to said transmitter, and transmitting an information transmission comprising the downloadable processor instructions and one or more control signals ;

wherein said method controls said plurality of receiver stations.

206. (New Claim) The method of claim 205, wherein said downloadable processor instruction or some identification data in respect of said downloadable processor instruction are embedded in a television signal.

207. (New Claim) The method of claim 205, wherein a television program is displayed at a receiver station and said downloadable processor instruction programs said receiver station processor or computer to output video, audio, or text in the context of said television program or to process a viewer reaction to said television program or to select information that supplements said television program content.

208. (New Claim) The method of claim 205, wherein said one or more control signals incorporate some of said downloadable processor instruction.

209. (New Claim) A method of transmitting data of interest to a receiver station from a remote data source, said data of interest for use at the receiver station in generating or outputting a receiver specific datum, said method comprising the steps of:

storing data at said remote data source;  
receiving at said remote data source a query from said receiver station;  
transmitting said data from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing some of said transmitted data;  
transmitting from a second remote source to said receiver station a signal which controls said receiver station to operate a computer to broadcast or cablecast network control and process said selected and stored some of said transmitted data ;  
wherein said method transmits to said receiver station from said remote data source.

210. (New Claim) A method of transmitting subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

(1) inputting a subscriber reaction at a subscriber station;  
(2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of a specific subscriber input;

- (3) determining the presence of said specific subscriber input at said subscriber station by processing said subscriber reaction;
- (4) processing said instruct signal which is effective to operate a computer under broadcast or cablecast network control at said subscriber station in consequence of said step of determining; and
- (5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing ;
- wherein said method transmits said subscriber station indicia.

211. (New Claim) The method of claim 210, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

- storing a subscriber instruction to receive one or more specific mass medium programs, data, news items, or computer control instructions; and
- receiving one or more specific mass medium programs, data, news items, or computer control instructions in accordance with said instruction.

212. (New Claim) The method of claim 210, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

- storing a subscriber instruction to process or present one or more mass medium programs, data, news items, or computer control instructions in a specific fashion; and
- processing or presenting one or more specific mass medium programs, data, news items, or computer control instructions in accordance with said instruction.

213. (New Claim) The method of claim 210, wherein said information that designates a specific subscriber input or said instruct signal is detected in an information transmission from a data or programming source, said method further comprising the steps of:

programming a processor to respond to information communicated from a data or programming source;

receiving an information transmission from a data or programming source;

inputting at least some of said information transmission to a control signal detector;

detecting data or said instruct signal in said information transmission; and  
passing said detected data or said instruct signal to said processor.

214. (New Claim) A method of communicating to a remote station information on the use of a resource or a signal at a receiver station, said receiver station having a processor, and a controlled device,, said method comprising the steps of:

(1) identifying at least one of a computing resource to be operated under broadcast or cablecast network control or a control signal which is effective to operate said resource under broadcast or cablecast network control;

(2) monitoring said at least one of said resource or said control signal;

(3) storing a record of the use of said at least one of said resource or said control signal from said step of monitoring; and

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(4) communicating information evidencing said use of said at least one of said resource or said control signal from said step of storing a record from said receiver station to a remote station ;

wherein said method communicates to said remote station said information on the use of said resource or said control signal at said receiver station.

215. (New Claim) The method of claim 214, wherein the stored evidence information identifies or designates one or more of:

- (1) a mass medium program;
  - (2) a proper use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) a source or supplier of data;
  - (11) a publication, article, publisher, distributor, or an advertisement;
- and
- (12) an indication of copyright.

216. (New Claim) A method of signal processing at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

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receiving receiver identification signals that identify specific signal content for at least one of a plurality of concurrent broadcast or cablecast signal transmissions;

providing a comparison signal to said processor;

comparing said comparison signal to said identification signals and generating a control signal identifying a desired one of said plurality of broadcast or cablecast signal transmissions;

tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of broadcast or cablecast signal transmissions;

inputting at least some of said desired signal transmission to said processor; and

①/ cont responding to an instruct signal detected in said desired signal transmission which is effective to operate a computer under broadcast or cablecast network control;

wherein said method operates signal processing at said receiver station.

217. (New Claim) A method of controlling a remote intermediate data transmitter station to communicate data to one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more signals which are effective at a receiver station to instruct a computer or processor, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter for communicating said data, a receiver for receiving said data from at least one origination transmitter station, a control signal detector, and a controller or computer capable of controlling one or more of said selective transfer devices, and with said remote transmitter station adapted to detect the presence of one or

more control signals, to control the transfer of at least one instruct signal in response to said one or more control signals, and to deliver at its broadcast or cablecast transmitter said at least one instruct signal, said method comprising the steps of:

(1) receiving said at least one instruct signal at said at least one origination transmitter station and delivering said at least one instruct signal to at least one origination transmitter, said at least one instruct signal being effective at a receiver station to operate a computer under broadcast or cablecast network control;

(2) receiving said one or more control signals which at the remote intermediate data transmitter station operate to control the transmission of said instruct signal; and

(3) transmitting said one or more control signals to said at least one origination transmitter before a specific time ;

wherein said method controls said remote intermediate data transmitter station.

218. (New Claim) The method of claim 217, further comprising the step of embedding a specific one of said one or more control signals in said at least one instruct signal or in an information transmission containing said at least one instruct signal before transmitting said at least one instruct signal to said remote transmitter station.

219. (New Claim) The method of claim 217, wherein said specific time is a scheduled time of transmitting said at least one instruct signal or some information associated with said at least one instruct signal from said remote

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intermediate data transmitter station and said one or more control signals are effective at said remote intermediate data transmitter station to control one or more of said plurality of selective transfer devices at different times.

220. (New Claim) A method of controlling a network comprising a remote intermediate data transmitter station and one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter for transmitting one or more signals which are effective at a receiver station to instruct a processor, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter for communicating data, a receiver, a control signal detector, and a controller or computer capable of controlling one or more of said selective transfer devices, and with said remote transmitter station adapted to detect the presence of one or more control signals, to control the transfer of specific at least one signal in response to said one or more control signals, and to deliver at its broadcast or cablecast transmitter one or more discrete signaling appearances or processor instructions, said network having at least one processor capable of assembling said one or more processor instructions, said method comprising the steps of:

(1) receiving a at least one discrete signaling appearance to be transmitted by the remote intermediate data transmitter station and delivering said at least one discrete signaling appearance to at least one origination transmitter, said at least one discrete signaling appearance being operative in said network to serve as a basis for assembling at least one processor instruction, said at least one processor instruction being effective at the receiver station to operate a computer under broadcast or cablecast network control;

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(2) receiving said one or more control signals which at the remote intermediate data transmitter station operate to control the transfer of said at least one discrete signaling appearance; and

(3) transferring said one or more control signals to said at least one origination transmitter before a specific time, said at least one origination transmitter transmitting said at least one discrete signaling appearance and said one or more control signals;

wherein said method controls said network.

221. (New Claim) The method of claim 220, further comprising the step of embedding said one or more control signals in an information transmission containing said discrete signaling appearance before transmitting said discrete signaling appearance to said remote transmitter station.

222. (New Claim) The method of claim 220, wherein said specific time is a scheduled time of transmitting said at least one discrete signaling appearance or said at least one processor instruction from said remote intermediate data transmitter station and said one or more control signals is effective at the remote intermediate data transmitter station to control one or more of said plurality of selective transfer devices at different times.

223. (New Claim) The method of claim 220, further comprising the step of embedding at least one of said at least one discrete signaling appearance and said one or more control signals in a non-visible portion of a television signal or a multichannel broadcast or cablecast signal.

224. (New Claim) The method of claim 220, wherein said one or more control signals comprise a code or datum which operates to select said at least one discrete signaling appearance, said at least one processor instruction, or some program content associated with said at least one discrete signaling appearance or said at least one processor instruction, said method further comprising the step of:

transmitting an instruct signal which operates at the remote intermediate data transmitter station at said specific time to communicate said code or datum to said at least one origination transmitter.

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225. (New Claim) A method of controlling a remote transmitter station to deliver a receiver specific output at a receiver station and controlling said receiver station to communicate one or more receiver specific data to a remote data collection station, with said receiver station being remote from said remote transmitter station and said remote data collection station being remote from said receiver station, said method comprising the steps of:

(1) receiving at the remote transmitter station one or more instruct signals which operate at the receiver station to operate a computer under broadcast or cablecast network control and to ~~assemble or communicate~~ receiver specific data to said remote data collection station;

(3) receiving a control signal which operates at the remote transmitter station to control the transmission of said one or more instruct signals and transmitting said control signal to said remote transmitter station;

(4) receiving at least one code or datum designating a said one or more instruct signal, and said remote transmitter station transferring said at least one code or datum to a transmitter; and

(5) transmitting from said remote transmitter station at least one information transmission containing said one or more instruct signals and said at least one code or datum, said one or more instruct signals being transmitted at one or more specific times or on one or more specific channels in accordance with said control signal ;

wherein said method controls said remote transmitter station.

226. (New Claim) The method of claim 225, wherein said one or more receiver specific data evidence the availability, use, or usage of information or evidence a receiver specific response to said one or more instruct signals.

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227. (New Claim) The method of claim 225, wherein said one or more instruct signals include downloadable processor instruction.

228. (New Claim) A method of controlling one or more of a plurality of receiver stations each of which includes a mass medium program receiver, a signal detector, at least one computer or processor, and with each said receiver station adapted to detect the presence of one or more control signals and to input a subscriber reaction to a specific offer communicated in a mass medium program, said method of controlling comprising the steps of:

(1) receiving at least one instruct signal at a transmitter station and delivering said instruct signal to a transmitter, said at least one instruct signal being effective at said one or more receiver stations to operate a computer under broadcast or cablecast network control;

(2) receiving a code or datum at said transmitter station, said code or datum designates said instruct signal or a said subscriber reaction;

(3) receiving said one or more control signals at said transmitter station, said one or more control signals at the one or more receiver stations designate a broadcast or cablecast network control;

(4) transferring said code or datum or said one or more control signals to said transmitter at said transmitter station; and

(5) transmitting said at least one instruct signal, said code or datum, and said one or more control signals from said transmitter station ;

wherein said method controls said one or more of a plurality of receiver stations.

229. (New Claim) The method of claim 228, wherein said one or more control signals or said code or datum is embedded in a television signal or in a signal containing a television program.

230. (New Claim) The method of claim 228, wherein said one or more control signals are effective to output a viewer order for said designated product or service, said method further comprising the steps of communicating to said transmitter and transmitting some information which is effective at the receiver station to select or assemble specific information to communicate to said remote data collection site.

231. (New Claim) The method of claim 228, wherein said one or more control signals incorporate downloadable executable code.

232. (New Claim) The method of claim 228, wherein said mass medium program is text.

233. (New Claim) A method of encoding signals to control a presentation comprising the steps of:

- receiving and storing a program that contains video information;
- receiving an instruction, said instruction having effect at a user station to operate a computer under broadcast or cablecast network control;
- encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal for directing a processor at said user station to perform said effect indicated by said instruction with said program; and
- storing said control signal from said step of encoding in conjunction with said program.

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234. (New Claim) The method of claim 233, wherein supplemental program material is stored at the same location as said processor and said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

- storing supplemental program material in conjunction with said program and said control signal; and

- storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at a user station to query a remote station or receive supplemental program material in a broadcast or cablecast transmission.

235. (New Claim) The method of claim 233, wherein said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over a broadcast or cablecast network to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

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cont of: 236. (New Claim) The method of claim 233, further comprising the steps of:

receiving a second instruction, said second instruction being one of the group consisting of:

(1) an instruction which is effective at a user station to generate some output to be associated with said program;

(2) an instruction which is effective at a user station to generate some output to be associated with said product, service, or information presentation;

(3) an instruction which is effective at a user station to display a combined or sequential presentation of a mass medium program and a user specific datum;

(4) an instruction which is effective at a user station to process a user reaction to said program;

(5) an instruction which is effective at a user station to communicate to a remote station a query in respect of information to be associated with said program or to enable display of said program;

(6) an instruction which is effective at a user station to control a user station to receive information to supplement said program;

(7) an instruction which is effective at a user station to process a digital television signal which is separately defined from standard analog television; and

(8) an instruction which is effective at a user station to serve as a basis for enabling an output device to display at least some of said program or for enabling a processor to process one or more processor instructions;

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing an ancillary processor to perform said specified second effect indicated by said second instruction with said program; and

storing said second control signal from said second step of encoding in conjunction with said program.

237. (New Claim) The method of claim 233, further having one the group consisting of:

embedding said control signal in the non-visible portion of a television signal;

embedding a code in said program that enables a computer or controller to control a presentation of said program in accordance with said control signal;



communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program some information to evidence an availability, use, or usage of said program at a user station.

238. (New Claim) A method of controlling a receiver station including the steps of:

detecting one of the presence and the absence of a broadcast or cablecast control signal;

inputting an instruct-to-react signal to a processor based on said step of detecting one of the presence and the absence of said broadcast or cablecast control signal;

controlling said processor to output specific information in response to said step of inputting said instruct-to-react signal; and

operating at least one of a computer under broadcast or cablecast network control on the basis of information received from said processor based on said step of controlling a processor.

239. (New Claim) The method of claim 238, wherein a buffer is operatively connected to said processor for buffering input, said method further comprising the step of:

bypassing said buffer and inputting said instruct-to-react signal directly to said processor.

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240. (New Claim) The method of claim 238 wherein said processor processes a datum designating a television channel or a television program, said method further having one step of the group consisting of:

controlling a tuner to tune a receiver to receive the television channel or television program designated by said processed datum;

controlling a selective transmission device to input to a control signal detector at least some portion of the television channel or television program designated by said processed datum;

controlling a control signal detector to search for one or more control signals in the television channel or television program designated by said processed datum;

controlling a selective transmission to input to a computer control signals detected in the television channel or television program designated by said processed datum;

controlling a computer to respond to control signals detected in the television channel or television program designated by said processed datum;

controlling a television monitor to display video or audio contained in the television channel or television program designated by said processed datum;

controlling a video recorder to record or play video or audio contained in the television channel or television program designated by said processed datum; and

controlling a selective transmission device to communicate to a video recorder or a television monitor the television channel or television program designated by said processed datum.

241. (New Claim) The method of claim 238, wherein said processor processes a datum designating one or more specific channels of a multichannel cable or broadcast signal, said method further having one step of the group consisting of:

controlling a tuner to tune a converter to receive the one or more specific channels designated by said processed datum;

controlling a selective transmission device to input to a control signal detector at least some portion of the one or more specific channels designated by said processed datum;

controlling a control signal detector to search for one or more control signals in the one or more specific channels designated by said processed datum;

controlling a selective transmission device to input to a computer control signals detected in the one or more specific channels designated by said processed datum;

controlling a computer to respond to control signals detected in the one or more specific channels designated by said processed datum;

controlling a television monitor to display video or audio contained in the one or more specific channels designated by said processed datum;

controlling a video recorder to record or play video or audio contained in the one or more specific channels designated by said processed datum; and

controlling a selective transmission device to communicate to a storage device or an output device the one or more specific channels designated by said processed datum.

242. (New Claim) A method of controlling a receiver station, said receiver station having a processor for passing and executing instructions and a

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clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of:

- receiving a broadcast or cablecast transmission;
- demodulating said broadcast or cablecast transmission to detect an information transmission thereon, said information transmission comprising an instruct signal which is effective to operate at least one of a computer under broadcast or cablecast network control;
- detecting said instruct signal on said information transmission and passing said instruct signal to said processor;
- delaying, under processor control, the passing of said instruct signal to a controllable apparatus;
- passing said instruct signal to said controllable apparatus on the basis of said timing signal; and
- controlling said controllable apparatus based on said instruct signal.

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243. (New Claim) The method of claim 242, further comprising the steps of:

- detecting a timing signal in said information transmission;
- passing said timing signal to said clock; and
- timing, under control of said clock, the passing of said instruct signal based on said timing signal.

244. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said

mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method comprising the steps of:

(1) receiving at a broadcast or cablecast transmitter station said instruct signal which is effective at the receiver station to operate at least one of a computer under broadcast or cablecast network control, and delivering the instruct signal to a transmitter;

(2) receiving at said transmitter station one or more control signals which at the receiver station operate to communicate the instruct signal to said at least one processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting the instruct signal and the one or more control signals ;

wherein said method controls at least one of a plurality of said receiver stations.

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245. (New Claim) The method of claim 244, wherein said instruct signal or some identification data in respect of said instruct signal is embedded in a television signal or in a signal containing a television program.

246. (New Claim) The method of claim 244, wherein a switch communicates signals selectively from a receiver and a memory or recorder to a transmitter, said method further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to a transmitter;

controlling said switch to communicate a signal to said transmitter in response to a signal which is effective at the transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source; and

controlling said switch to communicate to said memory or recorder a signal which is effective at the receiver station to instruct.

247. (New Claim) The method of claim 244, wherein a controller controls a switch to communicate to a transmitter a selected mass medium program or control signal, further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate one or more instruct signals according to a transmission schedule;

controlling said switch to communicate a signal from a specific one of a plurality of instruct signal sources; and

controlling said switch to communicate an instruct signal to a selected one of a plurality of transmitters.

248. (New Claim) The method of claim 244, further comprising one from the group consisting of:

transmitting to a receiver station one or more data that designate a time or a channel of transmission of said instruct signal or that specify the title of or

some subject matter contained in a mass medium program associated with said instruct signal; and

transmitting to a receiver station a control signal to cause said receiver station to tune to a broadcast or cablecast transmission containing a specific instruct signal.

249. (New Claim) A method for data promotion and delivery for use with an interactive mass medium program output apparatus comprising the steps of:

displaying a mass medium program that promotes data, said interactive mass medium program output apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said mass medium program whether said subscriber wants said data promoted in said step of displaying, said interactive mass medium program output apparatus having a memory for storing a code or datum;

receiving an reply from said subscriber at said input device in response to said step of prompting said subscriber, said interactive mass medium program output apparatus having a processor for processing said subscriber reply and said data;

processing said reply from said step of receiving a reply and selecting a code or datum designating said data, said interactive mass medium program output apparatus having a transmitter for communicating information to a remote station;

communicating said selected code or datum to a remote site, said interactive mass medium output apparatus and said remote site comprising a network having a plurality of transmitter stations;

assembling, in said network, at least one processor instruction which is effective at said interactive mass medium program output apparatus to operate a computer under broadcast or cablecast network control, said interactive mass medium program output apparatus having a receiver for receiving at least a of portion of said at least one processor instruction from said remote station;

delivering said at least a of portion of said at least one processor instruction at said interactive mass medium program output apparatus; and

operating at least one of said processor and said memory under broadcast or cablecast network control and processing said designated data on the basis of said ] at least a of portion of said at least one processor instruction.

250. (New Claim) The method of claim 249, wherein at least some portion of said signal unit is embedded in the non-visible portion of a television signal.

251. (New Claim) The method of claim 249, wherein information evidencing the availability, use or usage of said mass medium program or said data is stored or communicated to a remote data collection station, said method further comprising the step of selecting evidence information that identifies or designates one or more of:

- (1) a mass medium program;
- (2) a use of data;
- (3) a transmission station;



- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a unique identifier datum;
- (10) a source or supplier of data;
- (11) a publication, article, publisher, distributor, or an advertisement;
- and
- (12) an indication of copyright.

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252. (New Claim) The method of claim 249, wherein said signal unit incorporates executable code said method further comprising the steps of communicating said executable code to said processor and performing, on the basis of said executable code, one selected from the group consisting of:

- (1) receiving a signal containing said data;
- (2) actuating a video, audio, or print storage or output device, as appropriate, to store or output said data;
- (3) decrypting at least a portion of said data;
- (4) controlling a selective transmission device to communicate said data to a storage device or an output device;
- (5) generating a receiver specific datum to on the basis of said data;
- and
- (6) delivering mass medium programming at said interactive mass medium program output apparatus simultaneously or sequentially with at least some of said data.

253. A method of processing signals at a receiver station having a computer, a programmable controller, and an output device, said receiver station being programmed to store one or more user data and present output based on said stored one or more user data, said method comprising the steps of:

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- (a) receiving broadcast or cablecast information transmission containing downloadable executable code;
  - (b) detecting said downloadable executable code;
  - (c) passing at least some of said downloadable executable code to one of said computer and said programmable controller;
  - (d) controlling said programmable controller based on said downloadable executable code;
  - (e) generating a receiver specific datum by processing information that is stored in said computer;
  - (f) communicating said receiver specific datum to said output device; and subsequently
  - (g) ceasing to communicate said receiver specific datum to said output device.

254. (New Claim) The method of claim 253, further having at least one step of a group consisting of:

storing information evidencing a function performed in response to or in consequence of said downloadable executable code; and

communicating to a remote station information evidencing a function performed in response to or in consequence of said downloadable executable code.

255. (New Claim) The method of claim 253, further comprising the step of programming said receiver station to select or respond to one or more control signals detected in a broadcast or cablecast transmission.

256. (New Claim) The method of claim 253, wherein said receiver station is an intermediate transmission station and said output device is a transmitter, said method further having one of a group consisting of:  
embedding said receiver specific datum in a television or radio signal; and  
adding said receiver specific datum to an information transmission being communicated to said transmitter.

257. (New Claim) A method of processing signals at a receiver station having a computer and an output device, said receiver station being programmed to store one or more user data and present output based on said one or more user data stored, said method comprising the steps of:

storing one or more user data in said computer;  
receiving a broadcast or cablecast information transmission containing downloadable executable code based on said step of storing;  
detecting said downloadable executable code at said receiver station based on said step of receiving; and  
controlling said receiver station based on said downloadable executable code, with said step of controlling further comprising the steps of:

- (1) generating a receiver specific datum by processing information stored in said computer;
- (2) communicating said receiver specific datum to said output device; and subsequently,

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(3) ceasing to communicate said receiver specific datum to said output device.

258. (New Claim) A method of processing signals at a receiver station having a computer and at least one output device, said receiver station being programmed to store one or more user data and present output based on said stored one or more user data, said method comprising the steps of:

storing said one or more user data in said computer;

receiving a broadcast or cablecast information transmission containing a mass medium program based on said step of storing one or more user data;

detecting, locating, identifying, or assembling at least some code based on said step of receiving a broadcast or cablecast information transmission;

controlling said receiver station based on said at least some code, with said step of controlling further comprising the steps of:

(1) selecting said mass medium programming;

(2) generating a receiver specific datum by processing information stored in said computer; and

(3) communicating said receiver specific datum to said output device; and

outputting a simultaneous or sequential presentation of said selected mass medium and said receiver specific datum.

259. (New Claim) A method of controlling a plurality of receiver stations each of which includes a television receiver, a signal detector, a processor, and with each said receiver station adapted to detect one or more

control signals and programmed to process downloadable executable code, said method of controlling comprising the steps of:

(1) receiving at a transmitter station downloadable executable code which is effective at a receiver station to implement a scheme for presenting one of a group consisting of:

(a) output information content to supplement television programming;

(b) output information content to supplement audio programming;

(c) mass medium programming to supplement computer output; and

(d) multimedia;

said downloadable executable code having at each of said plurality of receiver stations a target processor to process data;

(2) transferring said downloadable executable code to a selective transfer device;

(3) receiving one or more control signals at said transmitter station, said one or more control signals operate to cause said downloadable executable code to be executed; and

(4) transferring said one or more control signals to said selective transfer device, and transmitting an information transmission comprising said downloadable executable code and said one or more control signals.

260. (New Claim) The method of claim 259, wherein said downloadable executable code or identification data in respect of said downloadable executable code are embedded in a television signal.

261. (New Claim) The method of claim 259, wherein a television program is displayed at a receiver station and said downloadable executable code programs said receiver station processor or computer to output video, audio, or text in the context of said television program or to process a subscriber reaction to said television program or to select information that supplements said television program.

262. (New Claim) The method of claim 259 wherein said one or more control signals incorporate some of said downloadable executable code.

263. (New Claim) A method of providing data to a receiver station from a remote data source, said data for use at the receiver station in generating or outputting a receiver specific datum, said method comprising the steps of:

storing said data at said remote data source;  
receiving at said remote data source a query from said receiver station;  
transmitting said data from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing some of said data transmitted;  
transmitting from a second remote source to said receiver station a signal which controls said receiver station to select and process an instruct signal, based on said data, which is effective at said receiver station to implement a scheme for presenting one of a group consisting of:

(a) output information content to supplement television programming;

- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia.

264. (New Claim) A method of communicating subscriber station information from a subscriber station to one or more remote data collection stations, said method comprising the steps of:

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- (1) inputting a subscriber reaction at said subscriber station;
  - (2) receiving at said subscriber station information that designates an instruct signal to process or an output to deliver in consequence of a specific subscriber input;
  - (3) determining the presence of said specific subscriber input at said subscriber station by processing said subscriber reaction;
  - (4) processing said instruct signal which is effective to implement a scheme for presenting one of a group consisting of:
    - (a) output information content to supplement television programming;
    - (b) output information content to supplement audio programming;
    - (c) mass medium programming to supplement computer output; and
    - (d) multimedia;at said subscriber station in consequence of said step of determining; and

(5) transferring from said subscriber station to one or more remote data collection stations an indicia confirming delivery of said instruct signal from said step of processing or confirming delivery of said effect from said step of processing.

265. (New Claim) The method of claim 264, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to receive one or more specific mass medium programs, data, news items, or computer control instructions; and  
receiving said one or more specific mass medium programs, data, news items, or computer control instructions in accordance with said instruction.

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266. (New Claim) The method of claim 264, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to process or present one or more mass medium programs, data, news items, or computer control instructions in a specific fashion; and  
processing or presenting said one or more specific mass medium programs, data, news items, or computer control instructions in accordance with said instruction.

267. (New Claim) The method of claim 264, wherein said information is detected in an information transmission from a data or programming source, said method further comprising the steps of:

programming a processor to respond to information communicated from a data or programming source;



receiving an information transmission from a data or programming source;  
inputting at least some of said information transmission to a control signal detector;  
detecting data or an instruct signal in said information transmission; and  
passing said detected data or instruct signal to said processor.

268. (New Claim) A method of gathering information on a use of a resource or a signal at a receiver station, said receiver station having a processor, and a controlled device, said receiver station transferring said information gathered to a remote station, said method comprising the steps of:

(1) identifying said resource to be activated for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia;

or a control signal which is effective to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;

- (c) mass medium programming to supplement computer output; and
- (d) multimedia;
- (2) monitoring said resource or said control signal;
- (3) storing a record of use of said resource or said control signal based on said step of monitoring; and
- (4) communicating data evidencing said use of said resource or said control signal from said receiver station to said remote station.

269. (New Claim) The method of claim 268, wherein data identifies or designates one or more of:

- (1) a mass medium program;
- (2) a proper use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a unique identifier datum;
- (10) a source or supplier of data;
- (11) a distributor or an advertisement; and
- (12) an indication of copyright.

270. (New Claim) A method of signal processing at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

receiving at said receiver identification signals that identify specific signal content for at least one of a plurality of concurrent broadcast or cablecast signal transmissions;

providing a comparison signal to said processor;

comparing said comparison signal to said identification signals and generating a control signal identifying a desired one of said plurality of broadcast or cablecast signal transmissions;

tuning said receiver, based on said control signal, to receive said desired one of said plurality of broadcast or cablecast signal transmissions;

inputting at least some of said desired signal transmission to said processor based on said step of tuning; and

responding to an instruct signal detected in said desired signal transmission which is effective to implement a scheme for presenting one of a group consisting of:

(a) output information content to supplement television programming;

(b) output information content to supplement audio programming;

(c) mass medium programming to supplement computer output; and

(d) multimedia.

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271. (New Claim) A method of controlling a remote intermediate transmitter station to communicate one or more instruct signals to one or more receiver stations, said remote intermediate transmitter station including a broadcast or cablecast transmitter, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter, a receiver for receiving said one or more instruct signals from one or more origination transmitters, a control signal detector, and a controller or computer capable of controlling at least one of said plurality of selective transfer devices, with said remote intermediate transmitter station adapted to detect one or more control signals, to control communication of said one or more instruct signals in response to said one or more control signals detected, and to deliver at said broadcast or cablecast transmitter said one or more instruct signals, said method comprising the steps of:

(1) receiving said one or more instruct signals at one or more origination transmitter stations and delivering said one or more instruct signals to said one or more origination transmitters, said one or more instruct signals being effective at said one or more receiver stations to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia;

(2) receiving said one or more control signals which at said remote intermediate transmitter station operate to control communication of said one or more instruct signals; and

(3) transmitting said one or more control signals to said broadcast or cablecast transmitter before a specific time.

272. (New Claim) The method of claim 271, further comprising the step of embedding one of said one or more control signals in said one or more instruct signals or in an information transmission containing said one or more instruct signals before transmitting said one or more instruct signals to said remote intermediate transmitter station.

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273. (New Claim) The method of claim 271, wherein said specific time is a scheduled time of transmitting said one or more instruct signals or some information associated with said one or more instruct signals from said remote intermediate data transmitter station and said one or more control signals are effective at said remote intermediate data transmitter station to control one or more of said plurality of selective transfer devices at different times.

274. (New Claim) A method of controlling a network comprising a remote intermediate transmitter station and one or more receiver stations, with said remote transmitter station including a broadcast or cablecast transmitter, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter, a receiver for receiving a first discrete signal from a first origination transmitter, a control signal detector, and a controller or computer capable of controlling one or more of said selective transfer devices,

with said remote intermediate transmitter station adapted to detect one or more control signals, to control communication of one of (i) said first discrete signal and (ii) at least one processor instruction in response to said one or more control signals detected, and to deliver at said broadcast or cablecast transmitter said one of said (i) first discrete signal and (ii) said at least one processor instruction, said network having at least one processor capable of assembling said at least one processor instruction based on said first discrete signal, said method comprising the steps of:

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(1) receiving said first discrete signal at a first origination transmitter station and delivering said first discrete signal to said first origination transmitter, said first discrete signal being operative in said network to serve as a basis for assembling at least one processor instruction, said at least one processor instruction being effective at said one or more receiver stations to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
  - (b) output information content to supplement audio programming;
  - (c) mass medium programming to supplement computer output; and
  - (d) multimedia;
- (2) receiving said one or more control signals which at said remote intermediate data transmitter station operate to control the communication of said first discrete signal; and
- (3) transferring said one or more control signals to said broadcast or cablecast transmitter before a specific time,

said transmitter transmitting said signal word and said one or more control signals.

275. (New Claim) The method of claim 274, further comprising the step of embedding said one or more control signals in an information transmission containing said first discrete signal before transmitting said first discrete signal to said remote transmitter station.

276. (New Claim) The method of claim 274, wherein said specific time is a scheduled time of transmitting programming containing said one of (i) said first discrete signal and (ii) said at least one processor instruction from said remote intermediate data transmitter station and said one or more control signals is effective at the remote intermediate data transmitter station to control one or more of said plurality of selective transfer devices at different times.

277. (New Claim) The method of claim 274, further comprising the step of embedding at least one of said first discrete signal and said one or more control signals in a non-visible portion of a television signal or a multichannel broadcast or cablecast signal.

278. (New Claim) The method of claim 274, wherein said one or more control signals comprise a code or datum which operates to select one (i) said first discrete signal and (ii) at least one processor instruction and program content associated with said one (i) said first discrete signal and (ii) at least one processor instruction, said method further comprising the step of:

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transmitting an instruct signal which operates at the remote intermediate transmitter station at said specific time to communicate said code or datum to a transmitter.

279. (New Claim) A method of controlling a remote transmitter station to deliver receiver specific output at a receiver station and controlling said receiver station to communicate one or more receiver specific data to a remote data collection station, with said receiver station being remote from said remote transmitter station and said remote data collection station being remote from said receiver station, said method of communicating comprising the steps of:

(1) receiving at the remote transmitter station one or more instruct signals which operate at the receiver station to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia;

and to assemble or communicate receiver specific data to a remote data collection site;

(2) receiving a control signal which operates at the remote transmitter station to control the communication of one or more instruct signals and communicating said control signal to said remote transmitter station;

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(3) receiving a code or datum designating a specific instruct signal to be transmitted by the remote transmitter station, and said transmitter station transferring said designated specific instruct signal to a transmitter; and

(4) transmitting from said remote transmitter station an information transmission comprising one or more designated instruct signals, said one or more instruct signals being transmitted at one or more specific times or on one or more specific channels in accordance with said control signal.

280. (New Claim) The method of claim 279, wherein said one or more receiver specific data evidence the availability, use, or usage of information or evidence a receiver specific response to said designated instruct signal.

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281. (New Claim) The method of claim 279, wherein said designated instruct signal comprises some downloadable executable code.

282. (New Claim) A method of controlling one or more of a plurality of receiver stations each of which includes a mass medium program receiver, a signal detector, at least one computer or processor, and with each said receiver station adapted to detect one or more control signals and to input a subscriber reaction to a specific offer communicated in a mass medium program, said method of controlling comprising the steps of:

(1) receiving an instruct signal at a transmitter station and delivering said instruct signal to a selective transfer device, said instruct signal being effective at a receiver station to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia;
- (2) receiving a code or datum at said transmitter station, said code or datum designates said instruct signal or a subscriber reaction to an offer communicated in said mass medium program;
- (3) receiving said one or more control signals at said transmitter station, said one or more control signals at the one or more receiver stations operate to present output in accordance with said scheme implemented;
- (4) transferring said code or datum or said one or more control signals to said transfer device at said transmitter station; and
- (5) transmitting said instruct signal, said code or datum and said one or more control signals.

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283. (New Claim) The method of claim 282, wherein said one or more control signals or said code or datum is embedded in a television signal or in a signal containing a television program.

284. (New Claim) The method of claim 282, wherein said one or more control signals are effective to output a subscriber order for a designated product or service, said method further comprising the steps of communicating to said transmitter and transmitting some information which is effective at the receiver

station to select or assemble specific information to communicate to a remote data collection site.

285. (New Claim) The method of claim 282, wherein said one or more control signals incorporate some downloadable executable code.

286. (New Claim) The method of claim 282, wherein said mass medium program is text.

287. (New Claim) A method of generating and encoding signals to control a presentation comprising the steps of:

receiving and storing a television program that contains video and audio;

receiving an instruction, said instruction having effect at a user station to

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cont implement a scheme for presenting one of a group consisting of:

(a) output information content to supplement television programming;

(b) output information content to supplement audio programming;

(c) mass medium programming to supplement computer output; and

(d) multimedia;

encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal for directing a processor at said user station to perform said effect indicated by said instruction with said program; and

storing said control signal from said step of encoding in conjunction with said program.

288. (New Claim) The method of claim 287, wherein supplemental program material is stored at said user station and said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of a group consisting of:

storing said supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at said user station to query a remote station for said supplemental program material or to receive supplemental program material at said user station in a broadcast or cablecast transmission.

289. (New Claim) The method of claim 287, wherein said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising the step of storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at said user station to one of:

transmit a combined video signal from said program and said video overlay generated by said processor over a broadcast or cablecast network to a plurality of receiver stations; and

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output at a video display at said user station a video image from said program with said video overlay generated by said processor to a co-located video display.

290. (New Claim) The method of claim 287, further comprising the steps of:

receiving a second instruction, said second instruction being one of a group consisting of:

- (1) an instruction which is effective at a user station to generate some output to be associated with said program;
- (2) an instruction which is effective at a user station to generate some output to be associated with said product, service, or information presentation;
- (3) an instruction which is effective at a user station to display a combined or sequential presentation of a mass medium program and a user specific datum;
- (4) an instruction which is effective at a user station to process a user reaction to said program;
- (5) an instruction which is effective at a user station to communicate to a remote station a query in respect of information to be associated with said program or to enable display of said program;
- (6) an instruction which is effective at a user station to control a user station to receive information to supplement said program;
- (7) an instruction which is effective at a user station to process a digital television signal which is separately defined from standard analog television; and

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(8) an instruction which is effective at a user station to serve as a basis for enabling an output device to display at least some of said program or for enabling a processor to process some executable code; encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing said ancillary processor to perform said specified second effect indicated by said second instruction and said program; and storing said second control signal from said second step of encoding in conjunction with said program.

291. (New Claim) The method of claim 287, further having one a group consisting of:

embedding said control signal in the non-visible portion of a television signal;

embedding a code in said program that enables a computer or controller to control a presentation of said program in accordance with said control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program some information to evidence an availability, use, or usage of said program at a user station.

292. (New Claim) A method of controlling a receiver station including the steps of:

detecting one of a presence and an absence of a broadcast or cablecast control signal;

inputting an instruct-to-react signal to a processor based on said step of detecting;

controlling said processor to output specific information in response to said step of inputting; and

implementing a scheme for presenting one of a group consisting of:

(a) output information content to supplement television programming;

(b) output information content to supplement audio programming;

(c) mass medium programming to supplement computer output; and

(d) multimedia;

on the basis of information received from said processor based on said step of controlling.

293. (New Claim) The method of claim 292, wherein a buffer is operatively connected to said processor for buffering input, said method further comprising the step of:

inputting said instruct-to-react signal directly to said processor.

294. (New Claim) The method of claim 292, wherein said processor processes a datum designating a television channel or a television program, said method further having one step of a group consisting of:

controlling a tuner to tune a receiver to receive the television channel or television program designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least some portion of the television channel or television program designated by said processed datum;

controlling a control signal detector to search for one or more control signals in the television channel or television program designated by said processed datum;

controlling said selective transfer device to input to a computer control signals detected in the television channel or television program designated by said processed datum;

controlling a computer to respond to control signals detected in the television channel or television program designated by said processed datum;

controlling a television monitor to display video or audio contained in the television channel or television program designated by said processed datum;

controlling a video recorder to record or play video or audio contained in the television channel or television program designated by said processed datum; and

controlling said selective transfer device to communicate to a video recorder or a television monitor the television channel or television program designated by said processed datum.

295. (New Claim) The method of claim 292, wherein said processor processes a datum designating one or more specific channels of a multichannel cable or broadcast signal, said method further having one step of a group consisting of:

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controlling a tuner to tune a converter to receive the one or more specific channels designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least some portion of the one or more specific channels designated by said processed datum;

controlling a control signal detector to search for one or more control signals in the one or more specific channels designated by said processed datum;

controlling said selective transfer device to input to a computer control signals detected in the one or more specific channels designated by said processed datum;

controlling a computer to respond to control signals detected in the one or more specific channels designated by said processed datum;

controlling a television monitor to display video or audio contained in the one or more specific channels designated by said processed datum;

controlling a video recorder to record or play video or audio contained in the one or more specific channels designated by said processed datum; and

controlling said selective transfer device to communicate to a storage device or an output device the one or more specific channels designated by said processed datum.

296. (New Claim) A method of controlling a receiver station, said receiver station having a processor for passing and executing instructions and a clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of:

receiving a broadcast or cablecast transmission;

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demodulating said broadcast or cablecast transmission to detect an information transmission thereon, said information transmission comprising an instruct signal which is effective to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia;

detecting said instruct signal on said information transmission and passing said instruct signal to said processor;

delaying, under processor control, the passing of said instruct signal to a controllable apparatus;

passing said instruct signal to said controllable apparatus on the basis of a timing signal; and

controlling said controllable apparatus based on said instruct signal.

297. (New Claim) The method of claim 296, further comprising the steps of:

detecting a timing signal in said information transmission;

passing said timing signal to said clock; and

timing, under control of said clock, the passing of said instruct signal based on said timing signal.

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298. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to one or more instruct signals, said method of communicating comprising the steps of:

(1) receiving at a broadcast or cablecast transmitter station an instruct signal which is effective at said receiver station to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia;

and delivering said instruct signal to a transmitter;

(2) receiving at said transmitter station one or more control signals which at said receiver station operate to communicate said instruct signal to a specific processor; and

(3) transferring said one or more control signals to the transmitter, said transmitter transmitting said instruct signal and said one or more control signals.

299. (New Claim) The method of claim 298, wherein said instruct signal or some identification data in respect of said instruct signal is embedded in a television signal or in a signal containing a television program.

300. (New Claim) The method of claim 298, wherein a switch communicates signals selectively from a receiver and a memory or recorder to a transmitter, said method further comprising one from a group consisting of:

detecting a signal which is effective at the transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to a transmitter;

controlling said switch to communicate a signal to said transmitter in response to a signal which is effective at the transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source; and

controlling said switch to communicate to said memory or recorder a signal which is effective at the receiver station to instruct.

301. (New Claim) The method of claim 298, wherein a controller controls a switch to communicate to a transmitter a selected mass medium program or control signal, further comprising one from a group consisting of:

detecting a signal which is effective at the transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate one or more instruct signals according to a transmission schedule;

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controlling said switch to communicate a signal from a specific one of a plurality of instruct signal sources; and

controlling said switch to communicate an instruct signal to a selected one of a plurality of transmitters.

302. (New Claim) The method of claim 298, further comprising one from a group consisting of:

transmitting to a receiver station one or more data that designate a time or a channel of transmission of said instruct signal or that specify the title of or some subject matter contained in a mass medium program associated with said instruct signal; and

transmitting to a receiver station a control signal to cause said receiver station to tune to a broadcast or cablecast transmission containing a specific instruct signal.

303. (New Claim) An interactive method for promotion and delivery of supplementary information for use with an interactive mass medium program output apparatus comprising the steps of:

outputting a mass medium program that promotes supplementary information, said interactive mass medium program output apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said mass medium program whether said subscriber wants said supplementary information promoted in said step of outputting, said interactive mass medium program output apparatus having a memory for storing a code or datum;

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receiving a reply from said subscriber at said input device in response to said step of prompting said subscriber, said interactive mass medium program output apparatus having a processor for processing said subscriber reply;

processing said reply from said step of receiving and selecting said code or datum designating said supplementary information, said interactive mass medium program output apparatus having a transmitter for communicating information to a remote station;

communicating said selected code or datum to a remote site, said interactive mass medium output apparatus and said remote site comprising a network having a plurality of transmitter stations;

assembling, in said network, at least one processor instruction which is effective at said interactive mass medium program output apparatus to implement a scheme for presenting one of a group consisting of:

- (a) output information content to supplement television programming;
- (b) output information content to supplement audio programming;
- (c) mass medium programming to supplement computer output; and
- (d) multimedia;

said interactive mass medium program output apparatus having a receiver for receiving a signal from a remote station;

delivering said at least one processor instruction at said interactive mass medium program output apparatus based on said step of receiving; and

delivering said designated supplementary on the basis of said at least one processor instruction.

304. (New Claim) The method of claim 303, wherein at least some portion of said at least one processor instruction is embedded in the non-visible portion of a television signal.

305. (New Claim) The method of claim 303, wherein information evidencing the availability, use or usage of said mass medium program or said data is stored or communicated to a remote data collection station, said method further comprising the step of selecting evidence information that identifies or designates one or more of:

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- (1) a mass medium program;
  - (2) a use of data;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) a source or supplier of data;
  - (11) a publication, article, publisher, distributor, or an advertisement;

and

- (12) an indication of copyright.

306. (New Claim) The method of claim 303, wherein said at least one processor instruction incorporates executable code said method further

comprising the steps of communicating said executable code to said processor and performing, on the basis of said executable code, one selected from a group consisting of:

- (1) receiving a signal containing said data;
  - (2) actuating a video, audio, or print storage or output device, as appropriate, to store or output said data;
  - (3) decrypting at least a portion of said data;
  - (4) controlling a selective transmission device to communicate said data to a storage device or an output device;
  - (5) generating a receiver specific datum to on the basis of said data;
- and
- (6) delivering mass medium programming at said interactive mass medium program output apparatus simultaneously or sequentially with at least some of said data.

307. (Thrice Amended) A method of processing signals at a receiver station having at least one reprogrammable controller and at least one output device, each of said at least one reprogrammable controller being capable of at least one of controlling at least one processor and at least one output device; said method comprising the steps of:

- (a) receiving an information transmission from a remote station, said information transmission containing downloadable processor instructions;
- (b) controlling said at least one processor to extract said downloadable processor instructions from said received information transmission;
- (c) controlling said at least one processor to one of detect and identify a control signal in one of a television and radio transmission based on said extracted downloadable processor instructions; and



(d) controlling said at least one output device to output mass medium programming based on controlling said processor to one of detect and identify said control signal.

308. (Thrice Amended) The method of claim 307, further having at least one step of the group consisting of:

storing information evidencing a function performed in one of response to and in consequence of said downloadable processor instructions; and

communicating to said remote station information evidencing a function performed in one of response to and in consequence of said downloadable processor instructions.

309. (New Claim) The method of claim 307, wherein said mass medium programming includes at least a portion of a graphic, said method further comprising the step of generating a signal containing said at least said portion of said graphic.

310. (New Claim) The method of claim 307, wherein said mass medium programming includes video, said method further comprising the step of generating at least one of a television signal and a computer output signal.

311. (New Claim) The method of claim 307, wherein said mass medium programming includes audio, said method further comprising the step of generating at least one of a television and a radio signal.

312. (New Claim) The method of claim 307, wherein said receiver station is an intermediate transmission station in one of a broadcast and a cablecast network and said at least one output device is one of a signal generator and a transmitter, said method further comprising the steps of:

adding at least one of digital data and instruct signals to an information transmission containing one of a television and a radio signal; and

transmitting said added one or more digital data or instruct signals and said one of said television and said radio signal.

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313. (New Claim) The method of claim 312, wherein said at least one of said digital data and said instruct signals are embedded in a non-visible portion of said television signal of said one of said television and said radio signal.

314. (New Claim) The method of claim 312, wherein said information transmission is one of a multichannel broadcast and a cablecast transmission, said method further comprising the step of adding said at least one of said digital data and said instruct signals to a data portion of said one of said multichannel broadcast and said cablecast transmission.

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315. ~~(New Claim) A method of controlling a plurality of receiver~~  
stations each of which includes a television receiver, a signal detector, a processor to process data, each said plurality of receiver stations is adapted to detect at least one control signal and programmed to process downloadable processor instructions, said method comprising the steps of:

(1) receiving at a transmitter station downloadable processor instructions which are effective at a receiver station of said plurality of receiver

stations to ~~implement a scheme for at least one of generating and transmitting~~  
one of a television and a radio signal;

(2) transferring said downloadable processor instructions from said transmitter station to a transmitter;

(3) receiving said at least one control signal at said transmitter station, said at least one control signal operates to execute said downloadable processor instructions; and

(4) transferring said at least one control signal from said transmitter station to said transmitter, and transmitting at least one information transmission comprising the downloadable processor instructions and said at least one control signal.

316. (New Claim) The method of claim 315, wherein one of said downloadable processor instructions and identification data with respect to said downloadable processor instructions are embedded in said television signal.

317. (New Claim) The method of claim 315, wherein a television program is displayed at a receiver station of said plurality of receiver stations and said downloadable processor instructions programs one of said processor and a computer to one of output at least one of video, audio, and text in the context of said television program, process a viewer reaction to said television program, and select information that supplements said television program.

318. (New Claim) The method of claim 315, wherein said at least one control signal incorporates a portion of said downloadable processor instructions.

319. (New Claim) A method of providing data of interest to a receiver station from a remote data source, said data of interest is for use in generating at the receiver station one of user specific programming and output, said method comprising the steps of:

storing at said remote data source data, including (1) an identification signal identifying said data and (2) an information signal, said data being the data of interest at said receiver station;

receiving at said remote data source a query from said receiver station;

transmitting from said remote data source to said receiver station in response to receiving said query at least the information signal of said data, said receiver station stores the information signal of said data and subsequently one of generates and transmits at least a portion of one of a television and a radio signal by processing said stored information signal on the basis of an instruct signal which is effective at the receiver station to implement a scheme for one of generating and transmitting said one of said television and said radio signal.

320. (New Claim) A method of communicating subscriber station information from a subscriber station to at least one remote data collection station, said method comprising the steps of:

- (1) inputting a subscriber reaction at said subscriber station;
- (2) receiving at said subscriber station information that designates one of an instruct signal to process and an output to deliver in consequence of specific subscriber input;
- (3) determining the presence of said specific subscriber input at said subscriber station by processing said subscriber reaction;

(4) processing said instruct signal which is effective to implement a scheme for at least one of generating and transmitting one of a television and a radio signal at said subscriber station in consequence of determining said presence of said specific subscriber input; and

(5) transferring from said subscriber station to said at least one remote data collection station at least one datum confirming delivery of said instruct signal in consequence of processing said instruct signal.

321. (New Claim) The method of claim 320, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to receive at least one of specific mass medium programming, data, news items, and computer control instructions; and

receiving said at least one of said specific mass medium programming, data, news items, and said computer control instructions in accordance with said subscriber instruction.

322. (New Claim) The method of claim 320, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to one of process and present at least one of specific mass medium programming, data, news items, and computer control instructions in a specific fashion; and

one of processing and presenting said at least one of said specific mass medium programming, data, news items, and said computer control instructions in accordance with said subscriber instruction.

323. (New Claim) The method of claim 320, wherein said information that designates one of a specific subscriber input and said instruct signal is detected in an information transmission from one of a data and programming source, said method further comprising the steps of:

programming a processor to respond to information communicated from said one of said data and said programming source;

receiving an information transmission from said one of said data and said programming source;

inputting at least a portion of said information transmission to a control signal detector;

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cont detecting one of said data and said instruct signal in said information transmission; and

passing said detected one of said data and said instruct signal to said processor.

324. (New Claim) A method of gathering information on use of one of a resource and a signal at a receiver station, said receiver station having a processor, and a controlled device, said receiver station transferring said gathered information to a remote station, said method comprising the steps of:

(1) identifying at least one of (i) a code resource to be implemented to at least one of generate and transmit one of a television and a radio signal and (ii) a control signal which is effective to implement a scheme for at least one of generating and transmitting one of said television and said radio signal;

(2) monitoring at least one of said resource and said control signal;

(3) storing a record of said use of at least one of said resource and said control signal based on monitoring one of said resource and said control signal; and

(4) communicating information evidencing said use of at least one of said resource and said control signal based on storing said record from said receiver station to said remote station.

325. (New Claim) The method of claim 324, wherein the stored evidence information one of identifies and designates one or more of:

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- (1) a mass medium program;
  - (2) a proper use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) one of a source and supplier of data;
  - (11) at least one of a publication, article, publisher, distributor, and an advertisement; and
  - (12) an indication of copyright.

326. (New Claim) A method of signal processing at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

receiving at said receiver identification signals that identify specific signal content for at least one of a plurality of concurrent broadcast and cablecast signal transmissions;

providing a comparison signal to said processor;

comparing said comparison signal to said identification signals and generating a control signal identifying a desired one of said plurality of broadcast and cablecast signal transmissions;

tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of broadcast and cablecast signal transmissions;

inputting at least a portion of said desired signal transmission to said processor; and

responding to an instruct signal detected in said desired signal transmission which is effective to implement a scheme for at least one of generating and transmitting one of a television and a radio signal.

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327. (New Claim) A method of controlling a remote intermediate transmitter station to communicate data to at least one receiver station, said remote transmitter station including one of a broadcast and a cablecast transmitter for transmitting at least one instruct signal which is effective at a receiver station to instruct at least one of a computer and a processor, a plurality of selective transfer devices each operatively connected to said one of said broadcast and said cablecast transmitter for communicating said at least one instruct signal, a receiver for receiving said at least one instruct signal from at least one origination transmitter station, a control signal detector, and a controller capable of controlling at least one of said selective transfer devices, said remote transmitter station adapted to detect at least one control signal to



control communication of said at least one instruct signal and to deliver to said one of said broadcast and said cablecast transmitter said at least one instruct signal, said method comprising the steps of:

- (1) receiving said at least one instruct signal at said at least one origination transmitter station and delivering said instruct signal to at least one origination transmitter, said at least one instruct signal being effective at a receiver station to implement a scheme for at least one of generating and transmitting one of a television and a radio signal;
- (2) receiving said at least one control signal which at the remote intermediate transmitter station operates to control the communication of said at least one instruct signal; and
- (3) transmitting said at least one control signal to said at least one origination transmitter before a specific time.

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328. (New Claim) The method of claim 327, further comprising the step of embedding said at least one control signal in one of said at least one instruct signal and an information transmission containing said at least one instruct signal before transmitting said at least one instruct signal to said remote transmitter station.

329. (New Claim) The method of claim 327, wherein said specific time is a scheduled time of transmitting one of said at least one instruct signal and information associated with said at least one instruct signal from said remote intermediate transmitter station and said at least one control signal are effective at said remote intermediate transmitter station to control said plurality of selective transfer devices at different times.

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330. (New Claim) A method of controlling a network comprising a remote intermediate transmitter station and at least one receiver station, said remote transmitter station including one of a broadcast and a cablecast transmitter, a plurality of selective transfer devices each operatively connected to said one of said broadcast and said cablecast transmitter for communicating data, a receiver for receiving information from at least one origination station, a control signal detector, and a controller capable of controlling at least one of said selective transfer devices, said remote transmitter station adapted to detect at least one control signal to control communication of specific signals and to deliver to said one of said broadcast and said cablecast transmitter at least one of discrete signaling appearances and processor instructions, said network having at least one processor capable of assembling processor instructions, said method comprising the steps of:

(1) receiving said discrete signaling appearances at said at least one origination transmitter station and delivering said discrete signaling appearances to said at least one origination transmitter, said discrete signaling appearances being operative in said network to serve as a basis for assembling said processor instructions, said processor instructions being effective in said network to implement a scheme for at least one of generating and transmitting one of a television and a radio signal;

(2) receiving at least one control signal which at the remote intermediate transmitter station operate to control communication of said discrete signaling appearances; and

(3) transferring said at least one control signal to said at least one origination transmitter before a specific time, said at least one origination

transmitter transmitting at least one information transmission containing said discrete signaling appearance and said at least one control signal.

331. (New Claim) The method of claim 330, further comprising the step of embedding said at least one control signal in an information transmission containing said discrete signaling appearance before transmitting said discrete signaling appearance to said remote transmitter station.

332. (New Claim) The method of claim 330, wherein said specific time is a scheduled time of transmitting one of said discrete signaling appearance and said processor instructions from said remote intermediate transmitter station and said at least one control signal is effective at the remote intermediate transmitter station to control said plurality of selective transfer devices at different times.

333. (New Claim) The method of claim 330, further comprising the step of embedding at least one of said discrete signaling appearance and said at least one control signal in a non-visible portion of one of a television signal and one of a multichannel broadcast and cablecast signal.

334. (New Claim) The method of claim 330, wherein said at least one control signal comprise one of a code and datum which operates to select at least one of said discrete signaling appearance, said processor instructions, and program content associated with one of said discrete signaling appearance and said processor instructions, said method further comprising the step of:

transmitting an instruct signal which operates at the remote intermediate transmitter station at said specific time to communicate said one of said code and said datum to said transmitter.

335. (New Claim) A method of controlling a remote transmitter station to deliver a receiver specific output at a receiver station and controlling said receiver station to communicate receiver specific data to a remote data collection station, with said receiver station being remote from said remote transmitter station and said remote data collection station being remote from said receiver station, said method comprising the steps of:

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- (1) receiving at the remote transmitter station at least one instruct signal which operates at the receiver station to implement a scheme for at least one of generating and transmitting one of a television and a radio signal and communicate receiver specific data to said remote data collection station;
  - (2) receiving a control signal which operates at said remote transmitter station to control communication of said at least one instruct signal and communicating said control signal to said remote transmitter station;
  - (3) receiving one of a code and datum designating said one of said television and said radio signal to be transmitted by said remote transmitter station, and said remote transmitter station transferring said designated one of said television and said radio signal to a transmitter; and
  - (4) transmitting from said remote transmitter station an information transmission comprising said at least one instruct signal, said at least one instruct signal being transmitted at one of specific times and on specific channels in accordance with said control signal.

336. (New Claim) The method of claim 335, wherein said receiver specific data evidences one of availability, use, and usage of one of information of one of evidence of a receiver specific response to said at least one instruct signal.

337. (New Claim) The method of claim 335, wherein said at least one instruct signal comprises downloadable processor instructions.

338. (New Claim) A method of controlling a network having a transmitter station and at least one receiver station including a receiver, a control signal detector, a processor, said method comprising the steps of:

(1) receiving one of a code and datum at said transmitter station, said one of said code and said datum designates at least one from the group consisting of:

- (a) an instruct signal which is operative in said network to control one of a television and radio studio;
- (b) one of television and radio programming information content to be one of generated and transmitted;
- (c) a stored one of television and radio programming to be transmitted; and
- (d) a viewer reaction to an offer communicated in a mass medium program;

(2) receiving said instruct signal at said transmitter station, said instruct signal operative in said network to perform at least one step from the group consisting of:

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- (a) implementing a scheme for at least one of generating and transmitting one of a television and a radio signal; and
- (b) instructing transmission of said one of television and said radio programming;
- (3) receiving at least one control signal at said transmitter station, said at least one control signal is operative in said network to designate at least one of said transmitter station and said at least one receiver station;
- (4) transmitting said one of said code and said datum and at least one of said instruct signal and said at least one control signal from said transmitter station; and
- (5) delivering said one of television and said radio programming to one of a viewer and a listener at an output device at said at least one receiver station in accordance with said transmitted one of said code and said datum and at least one of said instruct signal and said at least one control signal.
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339. (New Claim) The method of claim 338, wherein said output device outputs said delivered one of said television and said radio programming in one of a simultaneous and a sequential presentation with one of a television and a radio program, said method further having at least one step from the group consisting of:

- transferring said one of said television and said radio program to a transmitter at said transmitter station;
- embedding said one of said code and said datum in one of a television and a radio signal; and
- embedding said at least one of said instruct signal and said at least one control signal in said one of said television and said radio signal.

340. (New Claim) The method of claim 338, wherein said one of said television and said radio programming is at least one of a graphic image, a video overlay, and an audio explaining data specific to said one of said viewer and said listener, said method having at least one step from the group consisting of:

transmitting at least one discrete signaling appearance which is operative in said network to serve as a basis for controlling a computer to one of generate and output said one of said television and said radio programming;

transmitting one of a second instruct and said at least one control signal which is operative in said network to generate a signal containing said television or radio programming; and

transmitting one of a second instruct and said at least one control signal which is operative in said network to control a signal generator to communicate a signal containing said one of said television and said radio programming.

341. (New Claim) The method of claim 338, wherein one of said at least one receiver station is an intermediate transmitter station, said method having at least one step from the group consisting of:

transmitting at least one discrete signaling appearance which is operative to serve as a basis for controlling said intermediate transmitter station;

programming said intermediate transmitter station to respond to said transmitted at least one of said instruct signal and said at least one control signal; and

transmitting one of a second instruct and said at least one control signal which is operative at said intermediate transmitter station to respond to said one of said code and said datum.

342. (New Claim) The method of claim 338, wherein said transmitted at least one of said instruct signal and said at least one control signal is operative in said network to communicate a one of product and a service ordered by said one of said viewer and said listener, said method further comprising the step of communicating to said transmitter and transmitting information to evidence one of a delivery of said one of said product and said service and a use made of said one of said product and said service.

343. (New Claim) A method of generating and encoding signals to control a presentation comprising the steps of:

- receiving and storing a program that contains video information;
- receiving an instruction, said instruction having effect at a user station to implement a scheme for at least one of generating and transmitting one of a television and a radio signal;
- encoding and translating said instruction into a control signal, said control signal for directing a processor at said user station to perform said effect indicated by said instruction with said program; and
- storing said control signal from said step of encoding in conjunction with said program.

344. (New Claim) The method of claim 343, wherein supplemental program material is stored at said processor, said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program based on encoding said instruction, said method further comprising one step of the group consisting of:



storing said supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal based on encoding said instruction, said second control signal having effect at a user station to one of query a remote station and receive said supplemental program material in one of a broadcast and a cablecast transmission.

345. (New Claim) The method of claim 343, wherein said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over one of a broadcast and a cablecast network to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

346. (New Claim) The method of claim 343, further comprising the steps of:

receiving a second instruction, said second instruction being one of the group consisting of:

(1) an instruction which is effective at said user station to generate some output to be associated with said program;

(2) an instruction which is effective at said user station to generate some output to be associated with one of a product, service, and an information presentation;

(3) an instruction which is effective at said user station to display one of a combined and an sequential presentation of a mass medium program and a user specific datum;

(4) an instruction which is effective at said user station to process a user reaction to said program;

(5) an instruction which is effective at said user station to one of communicate to a remote station a query with respect to information to be associated with said program and to enable display of said program;

(6) an instruction which is effective at said user station to control a user station to receive information to supplement said program;

(7) an instruction which is effective at said user station to process a digital television signal which is separately defined from standard analog television, and

(8) an instruction which is effective at said user station to serve as a basis for one of enabling an output device to display at least a portion of said program and for enabling said processor to process at least one processor instruction;

encoding and translating said second instruction to a second control signal, said second control signal for directing said processor to perform said specified second effect indicated by said second instruction with said program; and

storing said second control signal based on encoding said second instruction in conjunction with said program.

347. (New Claim) The method of claim 343, further having one of the group consisting of:

embedding said control signal in a non-visible portion of a television signal;

embedding a code in said program that enables one of a computer and a controller to control a presentation of said program in accordance with said control signal;

communicating a program identification code and storing said program identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program information to evidence one of an availability, use, and a usage of said program at said user station.

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348. (New Claim) A method of controlling a receiver station including the steps of:

detecting one of a presence and an absence of a control signal;

inputting an instruct-to-react signal to a processor based on detecting said one of said presence and said absence of said control signal;

controlling said processor to output specific information in response to inputting said instruct-to-react signal; and

implementing a scheme for at least one of generating and transmitting one of a television and a radio signal based on the information received from said processor based on controlling said processor.

349. (New Claim) The method of claim 348, wherein a buffer is operatively connected to said processor for buffering input, said method further comprising the step of:

bypassing said buffer and inputting said instruct-to-react signal directly to said processor.

350. (New Claim) The method of claim 348, wherein said processor processes a datum designating one of a television channel and a television program, said method further having one step of the group consisting of:

controlling a tuner to tune a receiver to receive the one of said television channel and said television program designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least a portion of the one of said television channel and said television program designated by said processed datum;

controlling a control signal detector to search for said control signal in the one of said television channel and said television program designated by said processed datum;

controlling a selective transfer to input to a computer said control signal detected in the one of said television channel and said television program designated by said processed datum;

controlling a computer to respond to said control signal detected in the one of said television channel and said television program designated by said processed datum;

controlling a television monitor to display one of video and audio contained in the one of said television channel and said television program designated by said processed datum;

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controlling a video recorder to one of record and play one of video and audio contained in the one of said television channel and said television program designated by said processed datum; and

controlling a selective transfer device to communicate to one of a video recorder and a television monitor the one of said television channel and said television program designated by said processed datum.

351. (New Claim) The method of claim 348, wherein said processor processes datum designating at least one specific channel of one of a multichannel cable and a broadcast signal, said method further having one step of the group consisting of:

controlling a tuner to tune a converter to receive the at least one specific channel designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least a portion of the at least one specific channel designated by said processed datum;

controlling a control signal detector to search for said control signal in the at least one specific channel designated by said processed datum;

controlling a selective transfer to input to a computer said control signal detected in the at least one specific channel designated by said processed datum;

controlling a computer to respond to said control signal detected in the at least one specific channel designated by said processed datum;

controlling a television monitor to display one of video and audio contained in the at least one specific channel designated by said processed datum;

controlling a video recorder to one of record or play one of video and audio contained in the at least one specific channel designated by said processed datum; and

controlling a selective transfer device to communicate to one of a storage device and an output device the at least one specific channel designated by said processed datum.

352. (New Claim) A method of controlling a receiver station, said receiver station having a processor for passing and executing instructions and a clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of:

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- receiving one of a broadcast and a cablecast transmission;
- demodulating said one of said broadcast and said cablecast transmission to detect an information transmission thereon, said information transmission comprising an instruct signal which is effective to implement a scheme for at least one of generating and transmitting one of a television and a radio signal;
- detecting said instruct signal on said information transmission and passing said instruct signal to said processor;
- delaying, under processor control, the passing of said instruct signal to a controllable apparatus;
- passing said instruct signal to said controllable apparatus on the basis of a timing signal; and
- controlling said controllable apparatus based on said instruct signal.

353. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes one of a broadcast and a cablecast mass

medium program receiver, at least one output device, a control signal detector capable of detecting at least one instruct signal, at least one processor capable of responding to said at least one instruct signal, said method comprising the steps of:

(1) receiving at one of a broadcast and a cablecast transmitter station said at least one instruct signal which is effective at the receiver station to implement a scheme for at least one of generating and transmitting one of a television and a radio signal and delivering said at least one instruct signal to a transmitter;

(2) receiving at said transmitter station at least one control signal which at the receiver station operate to communicate said at least one instruct signal to a specific processor; and

(3) transferring said at least one control signal to the transmitter, said transmitter transmitting said at least one instruct signal and the one or more control signals.

354. (New Claim) The method of claim 353, wherein one of said at least one instruct signal and identification data with respect to said at least one instruct signal is embedded in one of a television signal and in a signal containing a television program.

355. (New Claim) The method of claim 353, wherein a switch communicates signals selectively from a receiver and one of a memory and a recorder to a transmitter, said method further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to a transmitter;

controlling said switch to communicate a signal to said transmitter in response to a signal which is effective at the transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source; and

controlling said switch to communicate to one of said memory and said recorder a signal which is effective at the receiver station to instruct.

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356. (New Claim) The method of claim 353, wherein a controller controls a switch to communicate to said transmitter one of a selected mass medium program and said at least one control signal, further comprising one from the group consisting of:

detecting a signal which is effective at the transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate said at least one instruct signal according to a transmission schedule;

controlling said switch to communicate a signal from a specific one of a plurality of instruct signal sources; and

controlling said switch to communicate said at least one instruct signal to said transmitter.



357. (New Claim) The method of claim 353, further comprising one from the group consisting of:

transmitting to a receiver station data that one of designates one of a time and a channel of transmission of said at least one instruct signal and specifies title of and subject matter contained in a mass medium program associated with said at least one instruct signal; and

transmitting to a receiver station a control signal to cause said receiver station to tune to one of a broadcast and a cablecast transmission containing a specific instruct signal.

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358. (New Claim) An interactive method for data promotion and delivery for use with an interactive mass medium program output apparatus comprising the steps of:

displaying a mass medium program that promotes data, said interactive mass medium program output apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said mass medium program whether said subscriber wants said data promoted in said step of displaying, said interactive mass medium program output apparatus having a memory for storing one of a code and datum;

receiving a reply from said subscriber at said input device in response to prompting said subscriber, said interactive mass medium program output apparatus having a processor for processing said subscriber reply and said data;

processing said received reply and selecting said one of said code and said datum designating said data, said interactive mass medium program output

apparatus having a transmitter for communicating information to a remote station;

communicating said selected code or datum to said remote station, said interactive mass medium output apparatus and said remote station comprising a network having a plurality of transmitter stations;

assembling, in said network, a signal which is effective at said interactive mass medium program output apparatus to implement a scheme for at least one of generating and transmitting one of a television and a radio signal, said interactive mass medium program output apparatus having a receiver for receiving said signal from said remote station;

delivering said signal at said interactive mass medium program output apparatus; and

implementing said scheme for one of generating and transmitting one of said television and said radio signal and said designated data on the basis of said signal.

359. (New Claim) The method of claim 358, wherein at least a portion of said signal is embedded in a non-visible portion of said television signal.

360. (New Claim) The method of claim 358, wherein information evidencing at least one of availability, use, and usage of one of said mass medium program and said data is one of stored and communicated to a remote data collection station, said method further comprising the step of selecting said evidence information that one of identifies and designates one or more of:

- (1) a mass medium program;
- (2) a use of data;

- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a unique identifier datum;
- (10) one of a source and a supplier of data;
- (11) one of a publication, article, publisher, distributor, and an advertisement; and
- (12) an indication of copyright.

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361. (New Claim) The method of claim 358, wherein said signal unit incorporates processor instructions said method further comprising the steps of communicating said processor instructions to said processor and performing, on the basis of said processor instructions, one selected from the group consisting of:

- (1) receiving a signal containing said data;
- (2) actuating one of a video, audio, print storage, and output device, as appropriate, to one of store and output said data;
- (3) decrypting at least a portion of said data;
- (4) controlling a selective transmission device to communicate said data to one of a storage device and an output device;
- (5) generating a receiver specific datum to based on said data; and

(6) delivering mass medium programming at said interactive mass medium program output apparatus one of simultaneously and sequentially with at least a portion of said data.

362. (New Claim) A method of delivering mass medium programming at a receiver station, said receiver station having a receiver for receiving an information transmission in respect of a mass medium programming presentation, at least one output device for outputting mass medium programming, a signal processor, and a storage device, said signal processor controlling the delivery of the mass medium programming at said at least one output device, said method comprising the steps of:

receiving from a remote station a signal containing at least one downloadable processor instruction and at least one of a code and a datum designating at least one of a television network, a radio network, and a multimedia network;

passing said signal to said signal processor;

detecting the presence of said at least one downloadable processor instruction and said at least one of said code and said datum designating one of said television network, said radio network, and said multimedia network;

processing at least one prestored datum in accordance with said at least one downloadable processor instruction; and

outputting mass medium programming in respect of said at least one of said television network, said radio network, and said multimedia network in

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accordance with said at least one downloadable processor instruction and said at least one prestored datum, wherein said method delivers mass medium programming at said receiver station.

363. (New Claim) The method of claim 362, wherein said at least one prestored datum controls one of receiving, communicating, and presenting said mass medium programming, said method further comprising the step of:

programming said receiver station to respond to digital control signals communicated in one of a broadcast transmission and a cablecast transmission.

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364. (New Claim) The method of claim 362, further comprising the steps of:

inputting a viewer datum; and  
presenting programming supplied by a remote mass medium programming provider.

365. (New Claim) The method of claim 362, further comprising at least one of the steps of:

storing information evidencing a function one of performed in response to and in consequence of at least one computer control instruction;  
and

communicating to the remote station information evidencing the function one of performed in response to and in consequence of said at least one computer control instruction.

366. (New Claim) The method of claim 362, further comprising the step of programming said receiver station to one of select and respond to computer control instructions detected in one of a broadcast transmission and a cablecast transmission.

367. (New Claim) The method of claim 362, wherein said receiver station is an intermediate transmission station, said method further comprising the step of:

controlling said receiver station to communicate said mass medium programming one of from the receiver and to a transmitter based on said at least one downloadable processor instruction.

368. (New Claim) A method of controlling a plurality of receiver stations each of said plurality of receiver stations including a television receiver, a signal detector, and a processor, wherein each of said plurality of receiver stations is adapted to detect the presence of at least one control signal and each of said plurality of receiver stations is programmed to process at least one downloadable processor instruction, said method comprising the steps of:

(1) receiving at a transmitter station the at least one downloadable processor instruction which is effective at a specific one of said plurality of receiver stations to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia

network, said at least one downloadable processor instruction having at each of said plurality of receiver stations a target processor to process data;

(2) transferring said at least one downloadable processor instruction from said transmitter station to a transmitter;

(3) receiving the at least one control signal at said transmitter station, said at least one control signal operating to execute said at least one downloadable processor instruction; and

(4) transferring said at least one control signal from said transmitter station to said transmitter and transmitting an information transmission including the at least one downloadable processor instruction and the at least one control signal, wherein said method controls said plurality of receiver stations.

369. (New Claim) The method of claim 368, wherein one of said at least one downloadable processor instruction and a portion of identification data in respect of said at least one downloadable processor instruction is embedded in a television signal.

370. (New Claim) The method of claim 368, wherein television programming is displayed at the specific one of said plurality of receiver stations and said at least one downloadable processor instruction programs one of said processor and a computer to one of:

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- (a) output one of video, audio, and text in the context of said television programming; and
- (b) process a viewer reaction to said television program; and
- (c) select information that supplements the content of said television programming.

371. (New Claim) The method of claim 368, wherein said at least one control signal incorporates at least a portion of said at least one downloadable processor instruction.

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372. (New Claim) A method of providing data to a receiver station from a remote data source, said data for use at the receiver station in one of generating a receiver specific datum and outputting a receiver specific datum, said method comprising the steps of:

- storing the data at said remote data source;
- receiving at said remote data source a query from said receiver station;
- transmitting said data from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing a portion of said transmitted data;
- transmitting from a second remote source to said receiver station a signal which is effective at said receiver station to implement a scheme for controlling at least one of a television network, a radio network, and a multimedia network.



373. (New Claim) A method of communicating subscriber station information to at least one remote data collection station, said method comprising the steps of:

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- (1) inputting a subscriber's reaction at a subscriber station;
  - (2) receiving at said subscriber station information that designates at least one of an instruct signal to process and an output to deliver in consequence of a specific subscriber input;
  - (3) determining the presence of said specific subscriber input at said subscriber station by processing said subscriber's reaction;
  - (4) processing said at least one instruct signal which is effective to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network in consequence of said step of determining; and
  - (5) transferring from said subscriber station to the at least one remote data collection station at least one datum confirming delivery of at least one of:
    - (a) said at least one instruct signal from said step of processing; and
    - (b) said effect from said step of processing, wherein said method communicates subscriber station information to said at least one remote data collection station.

374. (New Claim) The method of claim 373, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to receive at least one of specific mass medium programming, specific data, specific news items, and specific computer control instructions; and

receiving at least one of said specific mass medium programming, said specific data, said specific news items, and said specific computer control instructions in accordance with said subscriber instruction.

375. (New Claim) The method of claim 373, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to one of process and present at least one of mass medium programming, data, news items, and computer control instructions in a specific fashion; and

one of processing and presenting at least one of said specific mass medium programming, said data, said news items, and said computer control instructions in accordance with said subscriber instruction.

376. (New Claim) The method of claim 373, wherein said information that designates one of a specific subscriber input and said instruct signal is detected in an information transmission from one of a data source and a programming source, said method further comprising the steps of:

programming a processor to respond to information communicated from said one of said data source and said programming source;

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receiving the information transmission from one of said data source and said programming source;

inputting at least a portion of said information transmission to a control signal detector;

detecting one of data and said instruct signal in said information transmission; and

passing said detected one of said data and said instruct signal to said processor.

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377. (New Claim) A method of gathering information on the use of at least one of a resource and a signal at a receiver station, said receiver station having a processor and a controlled device, wherein said receiver station transfers said gathered information to a remote station, said method comprising the steps of:

- (1) identifying at least one of
  - (a) at least one of a television network control resource, a radio network control resource, a telecommunications network control resource, and a multimedia network control resource to be implemented; and
  - (b) a control signal which is effective to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network;
- (2) monitoring said at least one of said television network control resource, said radio network control resource, said telecommunications network

control resource and said multimedia network control resource and said control signal;

(3) storing a record of the use of said at least one of said television network control resource, said radio network control resource, said telecommunications network control resource and said multimedia network control resource and said control signal from said step of monitoring; and

(4) communicating information evidencing said use of said at least one of said television network control resource, said radio network control resource, said telecommunications network control resource and said multimedia network control resource and said control signal from said step of storing a record from said receiver station to a remote station, wherein said method gathers information on the use of said at least one of said resource and said signal at said receiver station.

378. (New Claim) The method of claim 377, wherein the stored evidence information one of identifies and designates at least one of:

- (1) mass medium programming;
- (2) a proper use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;

- (8) a time of transmission;
- (9) a unique identifier datum;
- (10) one of a source of data and a supplier of data;
- (11) one of a publication, an article, a publisher, a distributor, and an advertisement; and
- (12) an indication of copyright.

379. (New Claim) A method of signal processing at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

receiving on said receiver identification signals that identify specific signal content for at least one of a plurality of concurrent one of broadcast signal transmission and cablecast signal transmissions;

providing a comparison signal to said processor;

comparing said comparison signal to said receiver identification signals and generating a control signal identifying a desired one of said plurality of concurrent one of broadcast signal transmissions and cablecast signal transmissions;

tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of concurrent one of broadcast signal transmissions and cablecast signal transmissions;

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inputting at least a portion of said desired one of said plurality of concurrent one of broadcast signal transmissions and cablecast signal transmissions to said processor; and

responding to an instruct signal detected in said desired one of said plurality of concurrent one of broadcast signal transmissions and cablecast signal transmissions which is effective to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network, wherein said method processes signals at said receiver station.

380. (New Claim) A method of controlling a remote transmitter station to communicate data to at least one receiver station, with said remote transmitter station including one of a broadcast transmitter and a cablecast transmitter for transmitting at least one signal which is effective at a receiver station to instruct one of a computer and a processor, a plurality of selective transfer devices each operatively connected to said one of said broadcast transmitter and said cablecast transmitter for communicating the data, a data receiver for receiving said data from at least one origination transmitter station, a control signal detector, and one of a controller and a computer capable of controlling at least one of said selective transfer devices, and with said remote transmitter station adapted to detect the presence of at least one control signal, to control the communication of at least one instruct signal in response to detected specific control signals, and to

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deliver at its one of said broadcast transmitter and said cablecast transmitter said at least one instruct signal, said method comprising the steps of:

(1) receiving at said at least one origination transmitter station said at least one instruct signal to be transmitted by the remote transmitter station and delivering said instruct signal to at least one origination transmitter, said at least one instruct signal being effective at the remote transmitter station and the at least one receiver station to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network;

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Cont (2) receiving the at least one control signal which at the remote transmitter station operates to control the communication of said at least one instruct signal; and

(3) transmitting said at least one control signal from said at least one transmitter station before a specific time, wherein said method controls said remote transmitter station to communicate data to said at least one receiver station.

381. (New Claim) The method of claim 380, further comprising the step of:

embedding a specific one of said at least one control signal in one of said at least one instruct signal and an information transmission containing said at least one instruct signal before transmitting said at least one instruct signal to said remote transmitter station.

382. (New Claim) The method of claim 380, wherein said specific time is a scheduled time of transmitting one of said at least one instruct signal and a portion of information associated with said at least one instruct signal from said remote transmitter station, and wherein said at least one control signal is effective at said remote transmitter station to control at least one of said plurality of selective transfer devices at different times.

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383. (New Claim) A method of controlling a network including a remote transmitter station and at least one receiver station, wherein said remote transmitter station includes one of a broadcast transmitter and a cablecast transmitter for transmitting at least one instruct signal which is effective at a receiver station to instruct a processor, a plurality of selective transfer devices each operatively connected to said one of said broadcast transmitter and said cablecast transmitter for communicating data, a data receiver for receiving said data from at least one origination transmitter, a control signal detector, and one of a controller and a computer capable of controlling at least one of said plurality of selective transfer devices, wherein said remote transmitter station is adapted to detect at least one control signal, to control the communication of specific instruct signals and to deliver at said one of said broadcast transmitter and said cablecast transmitter at least one of: (i) at least one discrete signaling appearance and (ii) at least one of processor instruction, and wherein said network has at least one processor capable of assembling at least one of said at least one processor instruction, said method comprising the steps of:



(1) receiving at said at least one origination transmitter station the at least one discrete signaling appearance to be transmitted by the remote transmitter station and delivering said at least one discrete signaling appearance to at least one origination transmitter, wherein said at least one discrete signaling appearance is operative in said network to serve as a basis for assembling said at least one processor instruction, wherein said at least one processor instruction is effective to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network;

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(2) receiving said at least one control signal which at the remote transmitter station operates to control the communication of at least one of: (i) said at least one discrete signaling appearance and (ii) said at least one processor instruction to said one of said broadcast transmitter and said cablecast transmitter; and

(3) transferring said at least one control signal from said at least one origination transmitter station before a specific time, wherein said origination transmitter station transmits said at least one discrete signaling appearance and said at least one control signal, wherein said method controls said network.

384. (New Claim) The method of claim 383, further comprising the step of:

embedding said at least one control signal in an information transmission containing said at least one discrete signaling appearance before transmitting said at least one discrete signaling appearance to said remote transmitter station.

385. (New Claim) The method of claim 383, wherein said specific time is a scheduled time of transmitting at least one of said at least one of said at least one discrete signaling appearance and said at least one processor instruction from said remote transmitter station and said at least one control signal is effective at the remote transmitter station to control at least one of said plurality of selective transfer devices at different times.

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386. (New Claim) The method of claim 383, further comprising the step of:

embedding at least one of said at least one discrete signaling appearance and said at least one control signal in a non-visible portion of one of a television signal and one of a multichannel broadcast and a multichannel cablecast signal.

387. (New Claim) The method of claim 383, wherein said at least one control signal includes at least one of a code and a datum which operates to select at least one of said at least one discrete signaling appearance, said processor instruction, and a portion of program content associated with said at least one of said at least one discrete signaling appearance and said at least one processor instruction, said method further comprising the step of:

transmitting the at least one instruct signal which operates at the remote transmitter station at said specific time to communicate said at least one of said code and said datum to said transmitter.

388. (New Claim) A method of controlling a remote transmitter station to deliver a receiver specific output at a receiver station and controlling said receiver station to communicate at least one receiver specific datum to a remote data collection station, wherein said receiver station is remote from said remote transmitter station and said remote data collection station is remote from said receiver station, said method comprising the steps of:

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- (1) receiving at the remote transmitter station at least one instruct signal which operates at the receiver station to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network and to at least one of assemble and communicate the at least one receiver specific datum to a remote data collection site;
  - (2) receiving a control signal which operates at the remote transmitter station to control the communication of said at least one instruct signal and communicating said control signal to said remote transmitter station;
  - (3) receiving at least one of a code and a datum designating at least one specific instruct signal of said at least one instruct signal to be transmitted by the remote transmitter station, wherein said remote transmitter station transfers said at least one designated specific instruct signal to a transmitter; and

(4) transmitting from said remote transmitter station an information transmission including the at least one designated specific instruct signal, said at least one designated specific instruct signal being transmitted at one of at least one specific time and on at least one specific channel in accordance with said control signal.

389. (New Claim) The method of claim 388, wherein said at least one receiver specific datum one of evidences the availability, use, and usage of one of information and evidences a receiver specific response to said at least one designated specific instruct signal.

390. (New Claim) The method of claim 388, wherein said at least one designated specific instruct signal includes downloadable processor instructions.

391. (New Claim) A method of controlling at least one receiver station each of said at least one receiver station including a mass medium programming receiver, a signal detector, at least one of at least one computer and at least one processor, wherein each of said at least one receiver station is adapted to detect the presence of at least one control signal and to input a subscriber reaction to a specific offer communicated in mass medium programming, said method comprising the steps of:

(1) receiving an instruct signal at a transmitter station and delivering said instruct signal to a transmitter, said instruct signal being effective at said at least one receiver station to implement a scheme for controlling at least one of a

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television network, a radio network, a telecommunications network, and a multimedia network;

(2) receiving at least one of a code and a datum at said transmitter station, said at least one of said code and said datum designating at least one of said instruct signal and said subscriber reaction;

(3) receiving at least one control signal at said transmitter station, said at least one control signal at the at least one receiver station operating to designate at least one of a television network, a radio network, and a multimedia network;

(4) transferring at least one of said at least one of said code and said datum and said at least one control signal to the transmitter at said transmitter station; and

(5) transmitting said instruct signal, said at least one of said code and said datum and said at least one control signal from said transmitter station, wherein said method controls at least one receiver station.

392. (New Claim) The method of claim 391, wherein one of said at least one control signal and said one of said code and said datum is embedded in one of a television signal and a signal containing the television programming.

393. (New Claim) The method of claim 391, wherein said at least one control signal is effective to output a viewer order for one of a designated

product and a designated service in said specified offer, said method further comprising the steps of:

communicating said viewer order to said transmitter; and  
transmitting a portion of information which is effective at the receiver station to one of select and assemble specific information to communicate to a remote data collection site.

394. (New Claim) The method of claim 391, wherein said at least one control signal incorporates a portion of code.

395. (New Claim) The method of claim 391, wherein said mass medium programming is text.

396. (New Claim) A method of generating and encoding signals to control a presentation comprising the steps of:  
receiving and storing a program that contains video information;  
receiving an instruction, said instruction having effect at a user station to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network;  
encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal directing a processor at said user station to perform said scheme indicated by said instruction with said program; and

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storing said control signal from said step of encoding in conjunction with said program, wherein said method generates and encodes signals to control said presentation.

397. (New Claim) The method of claim 396, wherein supplemental program material is stored at the same location as said processor and said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising at least one of the steps of:

storing the supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at said user station to one of query a remote station and receive said supplemental program material in one of a broadcast transmission and a cablecast transmission.

398. (New Claim) The method of claim 396, wherein said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising at least one of the steps of:

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transmitting a combined video signal from said program and said video overlay generated by said processor over one of a broadcast network and a cablecast network to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

399. (New Claim) The method of claim 396, further comprising the steps of:

receiving a second instruction, said second instruction being effective to perform at least one of:

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- (1) generating at said user station an output to be associated with said program;
  - (2) generating at said user station an output to be associated with at least one of a product, a service, and an information presentation;
  - (3) displaying at said user station, at least one of a combined presentation and a sequential presentation of a mass medium program and a user specific datum;
  - (4) processing at said user station a user reaction to said program;
  - (5) performing at said user station at least one of communicating to a remote station a query in respect of information to be associated with said program and enabling display of said program;



(6) controlling said user station to receive information to supplement said program;

(7) processing at said user station a digital television signal which is separately defined from standard analog television; and

(8) serving at said user station as a basis for at least one of enabling an output device to display at least a portion of said program and enabling a processor to process a portion of executable code;

encoding said second instruction, said encoding of said second instruction translating said second instruction to a second control signal, said second control signal for directing an ancillary processor; and

storing said second control signal from said second step of encoding in conjunction with said program.

400. (New Claim) The method of claim 396, further comprising at least one of the steps of:

embedding said control signal in the non-visible portion of a television signal;

embedding a code in said program that enables at least one of a computer and a controller to control a presentation of said program in accordance with said control signal;

communicating a program identification code and storing said program identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program a portion of information to evidence at least one of an availability, use, and usage of said program at said user station.

401. (New Claim) A method of controlling a receiver station including the steps of:

detecting one of a presence and an absence of one of a broadcast control signals and a cablecast control signal;

inputting an instruct-to-react signal to a processor based on said step of detecting said one of said presence and said absence of said one of said broadcast control signal and said cablecast control signal;

controlling said processor to output specific information in response to said step of inputting said instruct-to-react signal; and

implementing a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network on the basis of said specific information received from said processor based on said step of controlling said processor.

402. (New Claim) The method of claim 401, wherein a buffer is operatively connected to said processor for buffering input, said method further comprising the step of:

bypassing said buffer and inputting said instruct-to-react signal directly to said processor.

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403. (New Claim) The method of claim 401, wherein said processor processes a datum designating at least one of a television channel and a television program, said method further comprising at least one of the steps of:

controlling a tuner to tune a receiver to receive said at least one of said television channel and said television program designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least a portion of said at least one of said television channel and said television program designated by said processed datum;

controlling a control signal detector to search for at least one control signal in said at least one of said television channel and said television program designated by said processed datum;

controlling a selective transfer device to input to a computer control signals detected in said at least one of said television channel and said television program designated by said processed datum;

controlling a computer to respond to control signals detected in said at least one of said television channel and said television program designated by said processed datum;

controlling a television monitor to display at least one of video and audio contained in said at least one of said television channel and said television program designated by said processed datum;

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controlling a video recorder to one of record and play one of video and audio contained in said at least one of said television channel and said television program designated by said processed datum; and

controlling a selective transfer device to communicate to at least one of a video recorder and a television monitor said at least one of said television channel and said television program designated by said processed datum.

404. (New Claim) The method of claim 401, wherein said processor processes a datum designating at least one specific channel of one of a multichannel cable signal and a multichannel broadcast signal, said method further further comprising at least one of the steps of:

controlling a tuner to tune a converter to receive said at least one specific channel designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least a portion of said at least one specific channel designated by said processed datum;

controlling a control signal detector to search for at least one control signal in said at least one specific channel designated by said processed datum;


controlling a selective transfer device to input to a computer control signals detected in said at least one specific channel designated by said processed datum;

controlling a computer to respond to control signals detected in said at least one specific channel designated by said processed datum;

controlling a television monitor to display at least one of video and audio contained in the at least one specific channel designated by said processed datum;

controlling a video recorder to one of record and play one of video and audio contained in the at least one specific channel designated by said processed datum; and

controlling a selective transfer device to communicate to at least one of a storage device and an output device the at least one specific channel designated by said processed datum.

 405. (New Claim) A method of controlling a receiver station, said receiver station having a processor for passing and executing instructions and a clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of:

receiving one of a broadcast transmission and a cablecast transmission;  
demodulating said one of said broadcast transmission and said cablecast transmission to detect an information transmission thereon, said information transmission including an instruct signal which is effective to implement a scheme for controlling at least one of a television network, a radio network, a telecommunications network, and a multimedia network;

detecting said instruct signal on said information transmission and passing said instruct signal to said processor;

delaying, under processor control, the passing of said instruct signal to a controllable apparatus;

passing said instruct signal to said controllable apparatus on the basis of the timing signal; and

controlling said controllable apparatus based on said instruct signal.

406. (New Claim) The method of claim 405, further comprising the steps of:

detecting the timing signal in said information transmission;

passing said timing signal to said clock; and

timing, under control of said clock, the passing of said instruct signal based on said timing signal.

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407. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes one of a broadcast mass medium program receiver and a cablecast mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to at least one instruct signal, and with each of said at least one of said plurality of receiver stations adapted to detect and respond to said at least one instruct signal, said method comprising the steps of:

(1) receiving at a transmitter station said at least one instruct signal which is effective at the at least one of said plurality of receiver stations to implement a scheme for controlling at least one of a television network, a radio

network, a telecommunications network, and a multimedia network and delivering said at least one instruct signal to a transmitter;

(2) receiving at said transmitter station at least one control signal which at said at least one of said plurality of receiver stations operates to communicate said at least one instruct signal to a specific one of said at least one processor; and

(3) transferring said at least one control signal to the transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal, wherein said method controls said at least one of said plurality of receiver stations.

408. (New Claim) The method of claim 407, wherein at least one of said at least one instruct signal and a portion of identification data in respect of said at least one instruct signal is embedded in at least one of a television signal and a signal containing a television program.

409. (New Claim) The method of claim 407, wherein a switch communicates signals selectively from a receiver and at least one of a memory and a recorder to said transmitter, said method further comprising at least one of the steps of:

detecting a signal which is effective at said transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to a transmitter;

controlling said switch to communicate a first signal to said transmitter in response to a second signal which is effective at the transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source; and

controlling said switch to communicate to said at least one of said memory and said recorder a signal which is effective at the receiver station to instruct.

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410. (New Claim) The method of claim 407, wherein a controller controls a switch to communicate to said transmitter at least one of a selected mass medium program and said at least one control signal, further comprising at least one of the steps of:

detecting a signal which is effective at the transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate said at least one instruct signal according to a transmission schedule;

controlling said switch to communicate the signal from a specific one of a plurality of instruct signal sources; and



controlling said switch to communicate said at least one instruct signal to a selected one of a plurality of transmitters.

411. (New Claim) The method of claim 407, further comprising at least one of the steps of:

transmitting to said at least one of a plurality of receiver stations at least one datum that designates at least one of a time and a channel of transmission of said at least one instruct signal and specifies at least one of the title of and a subject matter contained in a mass medium program associated with said at least one instruct signal; and

*DI cont* transmitting to said at least one of said plurality of receiver stations said at least one control signal to cause said at least one of said plurality of receiver stations to tune to one of a broadcast transmission and a cablecast transmission containing said at least one instruct signal.

412. (New Claim) A method for information promotion and information delivery for use with an interactive mass medium program output apparatus comprising the steps of:

displaying a mass medium program that promotes one of mass medium programming, data, and downloadable executable code, said interactive mass medium program output apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said mass medium program whether said subscriber wants said one of said mass medium programming, said data, and said downloadable executable code promoted in said step of displaying, said interactive mass medium program output apparatus having a memory for storing at least one of code and data;

receiving a reply from said subscriber at said input device in response to said step of prompting said subscriber, said interactive mass medium program output apparatus having a processor for processing said subscriber reply;

processing said reply from said step of receiving a reply and selecting at least a portion of said at least one of said code and said data designating at least a first of a television network, a radio network, a telecommunications network, and a multimedia network, said interactive mass medium program output apparatus having a transmitter for communicating information to a remote station;

communicating said selected at least one of said code and said data to said remote site, said interactive mass medium output apparatus and said remote site including a second network having a plurality of transmitter stations;

implementing, in said second network, a scheme for controlling said at least a first of said television network, said radio network, said telecommunications network, and said multimedia network, said interactive mass medium program output apparatus having a receiver for receiving a signal from said remote station; and

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delivering said promoted one of said mass medium programming, said data, and said downloadable executable code at said interactive mass medium program output apparatus.

413. (New Claim) The method of claim 412, wherein information evidencing at least one of the availability, use and usage of one of said mass medium program and said one of said mass medium programming, said data, and said downloadable executable code is at least one of stored and communicated to the remote data collection station, said method further comprising the step of selecting evidence information that one of identifies and designates at least one of:

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- (1) said mass medium program;
  - (2) said use of said data;
  - (3) at least one of said plurality of transmitter stations;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) at least one of a source and a supplier of data;
  - (11) at least one of a publication, article, publisher, distributor, and an advertisement; and

- (12) an indication of copyright.

414. (New Claim) The method of claim 412, wherein a signal is assembled in said network, said method further comprising the step of performing, on the basis of said signal, at least one of:

- (1) receiving a signal containing said data;
- (2) actuating at least one of a video device, an audio device, a print storage device and an output device, as appropriate, to one of store and output said data;
- (3) decrypting at least a portion of said data;
- (4) controlling a selective transfer device to communicate said data to at least one of a storage device and an output device;
- (5) generating a receiver specific datum to on the basis of said data;
- and
- (6) delivering said mass medium program at said interactive mass medium program output apparatus one of simultaneously and sequentially with at least a portion of said data.

415. (New Claim) A method of processing signals at a receiver station having a processor, said method comprising the steps of:

- (a) generating a control signal at a specific time based on a user input;
- (b) controlling, based on said control signal, an output device to communicate at least one program availability datum;

- (c) controlling, based on said control signal, a tuner to receive a specific signal in an information transmission communicated from a remote station;
- (d) receiving a mass medium program in said specific signal;
- (e) detecting at least one of a downloadable code and downloadable processor instructions in said information transmission;
- (f) passing said detected at least one of said downloadable code and said downloadable processor instructions to said processor; and
- (g) outputting at least a portion of said mass medium program in accordance with said detected and passed at least one of said downloadable code and said downloadable processor instructions, wherein said method processes said signals at said receiver station.

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416. (New Claim) The method of claim 415, further comprising the step of:

storing evidence information evidencing a function performed in response to said at least one of said downloadable code and said downloadable processor instructions; and

communicating to said remote station said evidence information.

417. (New Claim) The method of claim 415, further comprising the step of programming said receiver station to perform at least one of selecting and

responding to said at least one of said downloadable code and said  
downloadable processor instructions.

418. (New Claim) A method of signal processing at a receiver station,  
said receiver station including a receiver and a processor, said method  
comprising the steps of:

receiving on said receiver identification signals that identify specific  
programming content for at least one of a plurality of concurrent broadcast or  
cablecast signal transmissions;

providing a prestored comparison signal to said processor and comparing  
said prestored comparison signal to said identification signals;

generating a control signal based on said step of providing a prestored  
comparison signal, wherein said method processes said signals at said receiver  
station;

based on said generated control signal, performing at least one of the  
group consisting of:

- (1) identifying a desired one of said plurality of concurrent  
broadcast or cablecast signal transmissions;
- (2) tuning said receiver to receive a desired signal transmission;
- (3) selecting a broadcast or cablecast signalling scheme by  
which to perform at least one of receiving and transmitting a signal;
- (4) inputting at least one datum detected in said plurality of  
concurrent broadcast or cablecast signal transmissions;

(5) controlling said processor to extract information from said at least one of a plurality of concurrent broadcast or cablecast signal transmissions;

(6) assembling into at least one processor instruction at least one discrete signalling appearance received in said plurality of concurrent broadcast or cablecast signal transmissions;

(7) select at least one datum received in said plurality of concurrent broadcast or cablecast signal transmissions, wherein said selected at least one datum is to be processed in response to an instruct-to-generate signal;

(8) responding to an instruct-to-generate signal which is received in said plurality of concurrent broadcast or cablecast signal transmissions; and

(9) generating at least a portion of at least one of a television programming signal and other programming signal based on information received in said plurality of concurrent broadcast or cablecast signal transmissions.

419. (New Claim) The method of claim 418, further comprising the step of programming said receiver station to generate said control signal.

420. (New Claim) The method of claim 418, wherein said receiver station is an intermediate transmission station, said method further comprising

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the step of communicating at least one of said plurality of concurrent broadcast or cablecast signal transmissions to said processor.

421. (New Claim) The method of claim 418, further comprising the step of adding said generated control signal to at least a portion of said at least one of said plurality of concurrent broadcast or cablecast signal transmissions.

422. (New Claim) A method of controlling a plurality of receiver stations each of which includes a television receiver, a signal detector, a processor, wherein each of said plurality of receiver stations is adapted to detect at least one control signal and programmed to process downloadable processor instructions, said method comprising the steps of:

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- (1) receiving at a transmitter station at least one of a downloadable code and said downloadable processor instructions which are effective at said plurality of receiver stations to implement a scheme for generating said at least one control signal, and wherein said downloadable processor instructions target said processor, at each of said plurality of receiver stations, to process data;
  - (2) transferring said downloadable processor instructions from said transmitter station to a transmitter;
  - (3) receiving said at least one control signal at said transmitter station, wherein said at least one control signal operates to execute said downloadable processor instructions; and



(4) transferring said at least one control signal from said transmitter station to said transmitter, and transmitting an information transmission comprising said downloadable processor instructions and at least one control signal, wherein said method controls said plurality of receiver stations.

423. (New Claim) The method of claim 422, wherein at least one of said downloadable processor instructions and identification data in respect of said downloadable processor instructions are embedded in a television signal.

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424. (New Claim) The method of claim 422, wherein a television program is displayed at each of said plurality of receiver stations, wherein said downloadable processor instructions program said processor to perform one of (i) outputting at least one of video, audio, and text in context of said television program, (ii) processing a viewer reaction to said television program and (iii) selecting information that supplements said television program content.

425. (New Claim) The method of claim 422, wherein said at least one control signal incorporates at least a portion of said downloadable processor instructions.

426. (New Claim) A method of providing a plurality of data units of interest to a receiver station from at least one remote data source, wherein said data of interest is used, in said receiver station, in generating at least one of user specific programming and user specific output, said method comprising the steps of:

storing at said at least one remote data source said plurality of data units of interest, wherein each of said plurality of data units comprises (1) an identification signal identifying the datum and (2) an information signal, said plurality of data being the data of interest at said receiver station;

receiving at said at least one remote data source a query from said receiver station;

transmitting from said at least one remote data source to said receiver station in response to said step of receiving a query at least said information signal of at least one of said plurality of data units, wherein said receiver station stores information signal of said at least one of said plurality of data units;

transmitting, from said at least one remote data source to said receiver station, a datum that serves as a basis for implementing a scheme to generate a control signal, wherein said control signal is operative to select at least one instruct signal;

transmitting, from said at least one remote data source to said receiver station, said at least one instruct signal which is operative to process said stored information signal of said at least one of said plurality of data units to perform at least one of generating and presenting at least one of a user specific display and a user specific output, wherein said method provides said plurality of data of interest to said receiver station.

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427. (New Claim) A method of communicating subscriber station information from a subscriber station to at least one remote data collection station, said method comprising the steps of:

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- (1) inputting a subscriber reaction at said subscriber station;
  - (2) determining the presence of a specific subscriber input at said subscriber station by processing said subscriber reaction;
  - (3) receiving at said subscriber station information that designates an instruct signal to perform at least one of processing outputting to deliver in consequence of said specific subscriber input;
  - (4) processing said instruct signal which is effective to implement a scheme for generating a control signal at said subscriber station in consequence of said step of determining; and
  - (5) transferring from said subscriber station to said at least one remote data collection station an indicia confirming delivery of said instruct signal from said step of processing, wherein said method communicates said subscriber station information from said subscriber station.

428. (New Claim) The method of claim 427, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to receive at least one of (i) at least one specific mass medium program, (ii) data, (iii) news items, and (iv) computer control instructions; and

receiving said at least one of said at least one specific mass medium program, said data, said news items, and said computer control instructions in accordance with said subscriber instruction.

429. (New Claim) The method of claim 427, wherein said instruct signal is input by a subscriber, said method further comprising the steps of:

storing a subscriber instruction to perform at least one of processing and presenting at least one of at least one mass medium program, data, news items, and computer control instructions in a specific fashion; and

performing one of processing and presenting said at least one specific mass medium program, said data, said news items, and said computer control instructions in accordance with said subscriber instruction.

430. (New Claim) The method of claim 427, wherein at least one of said information that designates said specific subscriber input and said instruct signal is detected in an information transmission from at least one of a data source and a programming source, said method further comprising the steps of:

programming a processor to respond to information communicated from said at least one of said data source and said programming source;

receiving an information transmission from said at least one of said data and said programming source;

inputting at least a portion of said information transmission to a control signal detector;

detecting at least one of data and said instruct signal in said information transmission; and

passing said detected at least one of said data and said instruct signal to said processor.

431. (New Claim) A method of gathering information on the use of at least one of a resource and a signal at a receiver station, wherein said receiver station having a processor, and a controlled device, said receiver station transferring said information to a remote station, said method comprising the steps of:

(1) identifying a code resource to be implemented for generating an instruct signal which is effective to implement a scheme for generating a control signal;

(2) monitoring at least one of said code resource, said instruct signal, and said control signal;

(3) storing, at said receiver station, a record of the use of said at least one of said resource, said instruct signal, and said control signal from said step of monitoring; and

(4) communicating, from said receiver station to a remote station, information evidencing said use of at least one of said resource, said instruct signal and said control signal from said step of storing a record, wherein said method gathers information of the use of said at least one resource and said signal at said receiver station.

432. (New Claim) The method of claim 431, wherein said stored evidence information identifies at least one of:

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- (1) a mass medium program;
  - (2) a proper use of programming;
  - (3) a transmission station;
  - (4) said receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) at least one of a source and a supplier of data;
  - (11) at least one of a publication, article, publisher, distributor, and an advertisement; and
  - (12) an indication of copyright.

433. (New Claim) A method of controlling a remote intermediate transmitter station to communicate at least one instruct signal to at least one receiver station, wherein said remote intermediate transmitter station includes a broadcast or cablecast transmitter for transmitting said at least one signal, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter, a data receiver for receiving said at least one instruct signal from at least one origination transmitter station, a control signal

detector, and at least one of a controller and a computer which is capable of controlling at least one of said plurality of selective transfer devices, and wherein said remote intermediate transmitter station is adapted to detect the presence of at least one selective transfer control signal to control the communication of said at least one instruct signal and to deliver at a broadcast or cablecast transmitter said at least one instruct signal, said method comprising the steps of:

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- (1) receiving said at least one instruct signal and delivering said at least one instruct signal to at least one origination transmitter, wherein said at least one instruct signal being effective at said at least one receiver station to implement a scheme for generating a control signal;
  - (2) receiving said at least one selective transfer control signal which at said remote intermediate transmitter station operates to control the communication of said at least one instruct signal; and
  - (3) transmitting said at least one selective transfer control signal to said at least one origination transmitter before a specific time, wherein said method controls said remote intermediate transmitter station.

434. (New Claim) The method of claim 433, further comprising the step of embedding a specific one of said at least one selective transfer control signal in at least one of (i) said at least one instruct signal and (ii) an information transmission containing said at least one instruct signal before transmitting said at least one instruct signal to said remote intermediate transmitter station.

435. (New Claim) The method of claim 433, wherein said specific time is a scheduled time of transmitting at least one of said at least one instruct signal and information associated with said at least one instruct signal from said remote intermediate transmitter station, and wherein said at least one control signal is effective at said remote intermediate transmitter station to control at least one of said plurality of selective transfer devices at different times.

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436. (New Claim) A method of controlling a network comprising a remote intermediate transmitter station and at least one receiver station, wherein said remote intermediate transmitter station includes a broadcast or cablecast transmitter for transmitting at least one instruct signal which, a plurality of selective transfer devices each operatively connected to said broadcast or cablecast transmitter, a data receiver for receiving said at least one instruct signal from at least one origination transmitter station, a control signal detector, and at least one of a controller and a computer capable of controlling at least one of said plurality of selective transfer devices, wherein said remote intermediate transmitter station is adapted to detect at least one selective transfer control signal, to control the communication of specific signals and to deliver at said broadcast or cablecast transmitter at least of (i) at least one discrete signalling appearance and (ii) at least one of a code and processor instructions, and wherein said network having at least one processor capable of assembling said at least one of said code and said processor instructions, said method comprising the steps of:



(1) receiving a said at least one discrete signalling appearance to be transmitted by said remote intermediate transmitter station and delivering said at least one discrete signalling appearance to at least one origination transmitter, wherein said at least one discrete signalling appearance is operative in said network to serve as a basis for assembling said at least one of said code and said processor instructions, wherein said at least one of said code and said processor instructions is effective in said network to implement a scheme for generating a control signal;

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(2) receiving said at least one selective transfer control signal which at the remote intermediate transmitter station operates to control the communication of at least one of (i) said at least one discrete signalling appearance and (ii) said at least one of said code and said processor instructions to said broadcast or cablecast transmitter; and

(3) transferring said at least one selective transfer control signal to said at least one origination transmitter before a specific time, wherein said transmitter transmits said at least one discrete signalling appearance and said at least one selective transfer control signal, wherein said method controls said network.

437. (New Claim) The method of claim 436, further comprising the step of embedding said at least one selective transfer control signal in an information transmission containing said discrete signalling appearance before transmitting said discrete signalling appearance to said remote transmitter station.

438. (New Claim) The method of claim 436, wherein said specific time is a scheduled time of transmitting at least one of said at least one discrete signalling appearance, said code, and said processor instructions from said remote intermediate transmitter station and said at least one selective transfer control signal is effective at said remote intermediate transmitter station to control at least one of said plurality of selective transfer devices at different times.

439. (New Claim) The method of claim 436, further comprising the step of embedding at least one of said at least one discrete signalling appearance and said at least one selective transfer control signal in a non-visible portion of at least one of a television signal and a multichannel broadcast or cablecast signal.

440. (New Claim) The method of claim 436, wherein said at least one selective transfer control signal comprises at least one of a code and a datum which operates to select said at least one discrete signalling appearance, wherein at least one of said code, said processor instructions, and a program content is associated with at least one of (i) said at least one discrete signalling appearance and (ii) said at least one of said code and said processor instructions, said method further comprising the step of:

transmitting an instruct signal which operates at said remote intermediate transmitter station at said specific time to communicate at least one of said code and said datum to said at least one origination transmitter.

441. (New Claim) A method of controlling a remote transmitter station to deliver a receiver specific output at a receiver station and controlling said receiver station to communicate at least one receiver specific datum to a remote data collection station, wherein said receiver station being remote from said remote transmitter station, and wherein said remote data collection station being remote from said receiver station, said method comprising the steps of:

(1) receiving at said remote transmitter station at least one instruct signal which operates at said receiver station to implement a scheme for generating a control signal and to perform at least one of assembling and communicating said at least one receiver specific datum to said remote data collection station;

(2) receiving a communication control signal which operates at said remote transmitter station to control the communication of said at least one instruct signal and communicating said communication control signal to said remote transmitter station;

(3) receiving at least one of a code and a datum designating a specific one of said at least one instruct signal to be transmitted by said remote transmitter station, and said transmitter station transferring said designated specific one of said at least one instruct signal to at least one origination transmitter; and

(4) transmitting from said remote transmitter station an information transmission comprising said specific one of said at least one instruct signal,

wherein said specific one of said at least one instruct signal being transmitted at at least one of (i) at least one specific time and (ii) on at least one specific channel in accordance with said communication control signal, wherein said method controls said remote transmitter station.

442. (New Claim) The method of claim 441, wherein said at least one receiver specific datum evidences at least one of the availability, use, usage of information and a receiver specific response to said specific one of said at least one instruct signal.

443. (New Claim) The method of claim 441, wherein said specific one of said at least one instruct signal comprises at least one downloadable processor instruction.

444. (New Claim) A method of controlling at least one of a plurality of receiver station each of which includes a mass medium program receiver, a signal detector, at least one of at least one computer and at least one processor, wherein each of said plurality of receiver stations is adapted to detect at least one of at least one code and at least one datum and to input a viewer reaction to a specific offer communicated in a mass medium program, said method comprising the steps of:

(1) receiving an instruct signal at a transmitter station and delivering said instruct signal to a transmitter, wherein said instruct signal being effective at

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said plurality of receiver stations to implement a scheme for generating a control signal;

(2) receiving at least one of a first code and a first datum at said transmitter station, wherein said at least one of said first code and said first datum designates at least one of said instruct signal and said viewer reaction to said specific offer;

(3) receiving at least one of at least one second code and at least one second datum at said transmitter station, wherein said at least one of said at least one second code and said at least one second datum operate, at at least one of said plurality of receiver stations, to designate a time to generate at least one of said control signal and a device to control;

(4) transferring at least one of (i) said at least one of said first code and said first datum and (ii) at least one of said at least one second code and said at least one second datum to said transmitter at said transmitter station; and

(5) transmitting said instruct signal and said at least one of (i) said at least one of said first code and said first datum and (ii) said at least one of said at least one second code and said at least one second datum from said transmitter station, wherein said method controls said at least one of said plurality of receiver stations.

445. (New Claim) The method of claim 444, further comprising the step of embedding at least one of said instruct signal, said at least one of said first

code and said first datum, said at least one second code, and said at least second datum in the non-visible portion of a television signal.

446. (New Claim) The method of claim 444, wherein a viewer order for at least one of a product and a service is processed at one of said transmitter station and one of said plurality of receiver stations, said method further comprising the steps of communicating to said transmitter and transmitting information which is effective at at least one of said plurality of receiver stations to perform one of selecting and assembling specific information to communicate to a remote data collection site.

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447. (New Claim) The method of claim 444, wherein said instruct signal incorporates at least one of a downloadable code, downloadable processor instructions, and at least one of said at least one of said first code and said first datum, and wherein said at least one of said at least one second code and said at least one second datum is incorporated in at least one of said downloadable code and said processor instructions.

448. (New Claim) The method of claim 444, wherein said instruct signal and said at least one of said first code, said datum, said at least one second code and said at least one second datum are transmitted in a multichannel broadcast or cablecast information transmission.

449. (New Claim) A method of generating and encoding signals to control a presentation comprising the steps of:

receiving and storing a program that contains video information;

receiving an instruction, wherein said instruction having effect at a user station to implement a scheme for generating a control signal;

encoding said instruction, wherein said step of encoding translating said instruction to an instruct signal, wherein said instruct signal directs a processor at said user station to perform said implementing of said scheme; and

storing said instruct signal from said step of encoding in conjunction with said program, wherein said method generates and encodes said signals.

450. (New Claim) The method of claim 449, wherein supplemental program material is stored at the same location as said processor, and wherein said instruct signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising at least one of the steps of:

storing said supplemental program material in conjunction with said program and said instruct signal; and

storing a second instruct signal in conjunction with said program and said instruct signal from said step of encoding, wherein said second instruct signal having effect at said user station to perform at least one of querying a remote station and receiving said supplemental program material in a broadcast or cablecast transmission.

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451. (New Claim) The method of claim 449, wherein said instruct signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprises at least one of the steps of:

transmitting a combined video signal and said video overlay over a broadcast or cablecast network to a plurality of receiver stations; and

transmitting a combined video signal and said video overlay to a co-located video display.

452. (New Claim) The method of claim 449, further comprising the steps of:

receiving a second instruction, wherein said second instruction is effective to perform at least one of:

(1) generating, at said user station, an output to be associated with said program;

(2) generating an output to be associated with at least one of a product, a service, and an information presentation;

(3) displaying, at said user station, at least one of a combined and a sequential presentation of a mass medium program and a user specific datum;

(4) processing, at said user station, a user reaction to said program;



- (5) performing, at said user station, at least one of communicating to a remote station a query in respect of information to be associated with said program and enabling display of said program;
- (6) controlling said user station to receive information to supplement said program;
- (7) processing, at said user station, a digital television signal which is separately defined from standard analog television; and
- (8) serving, at said user station, as a basis for at least one of enabling an output device to display at least a portion of said program and enabling a processor to process at least one of code and processor instructions;
- encoding said second instruction wherein said encoding of said second instructions translates said second instruction to a second instruct signal, and wherein said second instruct signal directs an ancillary processor; and
- storing said second instruct signal in conjunction with said program.

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453. (New Claim) The method of claim 449, further comprising at least one of the steps of:

- embedding said instruct signal in the non-visible portion of a television signal;
- embedding a code in said program that enables at least one of a computer and a controller to control a presentation of said program in accordance with said instruct signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program information to evidence at least one of an availability, use, and usage of said program at said user station.

454. (New Claim) A method of controlling a receiver station including the steps of:

detecting, at a specific time, one of a presence and an absence of a first control signal;

inputting an instruct-to-react signal to a processor based on said step of detecting said one of said presence and said absence of said first control signal;

controlling said processor to output specific information in response to said step of inputting said instruct-to-react signal; and

implementing a scheme for generating a second control signal based on said specific information.

455. The method of claim 454, wherein a buffer is operatively connected to said processor for buffering input, said method further comprising the step of:

bypassing said buffer and inputting said instruct-to-react signal directly to said processor.

456. (New Claim) The method of claim 454, wherein said processor processes a datum designating at least one of a television channel and a television program, said method further having at least one of the steps of:

controlling a tuner to tune a receiver to receive said at least one of said television channel and said television program designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least a portion of said at least one of said television channel and said television program;

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controlling a control signal detector to search for said first control signal in said at least one of said television channel and said television program;

controlling a selective transfer device to input to a computer instruct signals detected in said at least one of said television channel and said television program;

controlling a computer to respond to instruct signals detected in said at least one of said television channel and said television program;

controlling a television monitor to display at least one of video and audio contained in said at least one of said television channel and said television program;

controlling a video recorder to perform at least one of recording and playing said at least one of video and audio contained in said at least one of said television channel and said television program; and

controlling a selective transfer device to communicate to at least one of a video recorder and a television monitor said at least one of said television channel and said television program.

457. (New Claim) The method of claim 454, wherein said processor processes a datum designating at least one specific channel of a multichannel cable or broadcast signal, said method further having at least one of the steps of:

controlling a tuner to tune a converter to receive said at least one specific channel;

controlling a selective transfer device to input to a control signal detector at least a portion of said at least one specific channel;

controlling a control signal detector to search for at least one instruct signal in said at least one specific channel;

controlling a selective transfer device to input to a computer instruct signals detected in said at least one specific channel;

controlling a computer to respond to instruct signals detected in said at least one specific channel;

controlling a television monitor to display at least one of video and audio contained in the at least one specific channel;

controlling a video recorder to perform at least one of recording and playing at least one of video and audio contained in said at least one specific channel; and

controlling a selective transfer device to communicate to at least one of a storage device and an output device said at least one specific channel.

458. (New Claim) A method of controlling a receiver station, said receiver station having a processor for passing and executing instructions and a clock operatively connected to said processor for inputting a timing signal, said method comprising the steps of:

receiving a broadcast or cablecast transmission;

demodulating said broadcast or cablecast transmission to detect an information transmission thereon, wherein said information transmission comprising an instruct signal which is effective to implement a scheme for generating a control signal;

detecting said instruct signal on said information transmission and passing said instruct signal to said processor;

delaying, under control of said processor, passing of said instruct signal to a controllable apparatus;

passing said instruct signal to said controllable apparatus based on said timing signal; and

controlling said controllable apparatus based on said instruct signal.

459. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes a broadcast or cablecast mass medium program receiver, at least one output device, a control signal detector, at least

one processor capable of responding to an instruct signal, and with each said mass medium program receiver station adapted to detect and respond to at least one instruct signal, said method comprising the steps of:

(1) receiving at a transmitter station said instruct signal, which is effective at said plurality of receiver stations to implement a scheme for generating a control signal, and delivering said instruct signal to a transmitter;

(2) receiving at said transmitter station at least one communication control signal which at said plurality of receiver stations operates to communicate said instruct signal to a specific one of said at least one processor; and

(3) transferring said at least one communication control signal to said transmitter, wherein said transmitter transmitting said instruct signal and said at least one communication control signal, wherein said method controls said at least one of said plurality of receiver stations.

460. (New Claim) The method of claim 459, wherein at least one of said instruct signal and identification data in respect of said instruct signal is embedded in at least one of a television signal and in a signal containing a television program.

461. (New Claim) The method of claim 459, wherein a switch communicates signals selectively from a receiver and at least one of a memory

and a recorder to said transmitter, said method further comprising at least one of the steps of:

detecting a signal which is effective at said transmitter station to instruct communication;

determining a specific signal source from which to communicate a signal to said transmitter;

controlling said switch to communicate a first signal to said transmitter in response to a second signal which is effective at said transmitter station to instruct communication;

controlling said switch to communicate a signal from a selected signal source; and

controlling said switch to communicate to said at least one of said memory and said recorder a signal which is effective at said receiver station to instruct.

462. (New Claim) The method of claim 459, wherein a controller controls a switch to communicate to said transmitter at least one of a selected mass medium program and said at least one communication control signal, said method further comprising at least one of the steps of:

detecting a signal which is effective at said transmitter station to instruct transmission;

inputting to said controller a signal which is effective to control said switch;

controlling said switch to communicate said instruct signal according to a transmission schedule;

controlling said switch to communicate a signal from a specific one of a plurality of instruct signal sources; and

controlling said switch to communicate said instruct signal to a selected one of a plurality of transmitters.

463. (New Claim) The method of claim 459, further comprising at least one of the steps of:

transmitting to said at least one of said plurality of receiver stations at least one datum that performs at least one of designating at least one of a time and a channel of transmission of said instruct signal and specifying at least one of a title of and a subject matter contained in a mass medium program associated with said instruct signal; and

transmitting to said at least one of said plurality of receiver stations said at least one communication control signal to cause said at least one of said plurality of receiver stations to tune to a broadcast or cablecast transmission containing a said instruct signal.

464. (New Claim) A method for promotion and delivery of information for use with an interactive mass medium program output apparatus comprising the steps of:



displaying a mass medium program that promotes information, said interactive mass medium program output apparatus having an input device to receive subscriber input from a subscriber;

prompting said subscriber during said mass medium program whether said subscriber wants said information promoted in said step of displaying, wherein said interactive mass medium program output apparatus having a memory for storing at least one of a code and a datum;

receiving a subscriber reply from said subscriber at said input device in response to said step of prompting said subscriber, said interactive mass medium program output apparatus having a processor for processing said subscriber reply and said at least one of said code and said datum;

processing said subscriber reply and selecting said at least one of said code and said datum designating said information, wherein said interactive mass medium program output apparatus having a transmitter for communicating information to a remote station;

communicating said selected said at least one of said code and said datum to said remote site, wherein said interactive mass medium output apparatus and said remote site comprising a network having a plurality of transmitter stations;

assembling, in said network, at least one processor instruction which is effective at said interactive mass medium program output apparatus to implement a scheme for generating a control signal, said interactive mass

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medium program output apparatus having a receiver for receiving a signal from said remote station;

delivering said at least one processor instruction at said interactive mass medium program output apparatus; and

delivering said designated information based on said at least one processor instruction.

465. (New Claim) The method of claim 464, wherein at least a portion of said at least one processor instruction is embedded in the non-visible portion of a television signal.

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466. (New Claim) The method of claim 464, wherein data evidencing at least one of availability, use and usage of said mass medium program and wherein said designated information is at least one of stored and communicated to a remote data collection station, said method further comprising the step of selecting evidence data that designates at least one of:

- (1) said mass medium program;
- (2) said use of said data,
- (3) at least one of said plurality of transmitter stations;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;

- (8) a time of transmission;
- (9) a unique identifier datum;
- (10) at least one of a source and a supplier of data;
- (11) at least one of a publication, article, publisher, distributor, and an advertisement; and
- (12) an indication of copyright.

467. (New Claim) The method of claim 464, further comprising the steps of communicating said at least one processor instruction to said processor and performing, based on said at least one processor instruction, at least one of:

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- (1) receiving a signal containing said designated information;
  - (2) actuating at least one of a video, an audio, a print storage and an output device, as appropriate, to perform at least one of storing an outputting said designated information;
  - (3) decrypting at least a portion of said designated information;
  - (4) controlling a selective transfer device to communicate said designated information to at least one of a storage device and an output device;
  - (5) generating a receiver specific datum based on said designated information; and
  - (6) delivering said mass medium program at said interactive mass medium program output apparatus simultaneously or sequentially with at least a portion of said designated information.
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